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THE BUILDER

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THE BUILDER

A RECORD OF ARCHITECTURE AND CONSTRUCTION.

VOL. CXVI.—No. 3964 JANUARY 24, 1919.

HOUSING AND DECENTRALIZATION.

A KEEN struggle is apparently taking place behind the official screen, between two rival departments of the State, on the question of housing. The matter concerns us all too seriously to be ignored, and it is too important to the community to be lightly passed over. The problem of housing demands of the architect, as, indeed, of the builder, different qualities from those required in the erection of a great modern building. Its operations are not complicated by highly scientific questions of construction, by an elaborate technical equipment, or by intricate legal problems, all entailing comprehensive training, special knowledge, and wide experience. Rather, it requires intimate sympathy and acquaintance with the people to be housed, with local conditions, with knowledge of all that concerns building, accompanied by some capacity to design appropriate and comely homes for those who toil. There has to be prepared a vast number of individual schemes composed of numerous attached and detached units, each comparatively simple in itself, but requiring a pleasing and sensible co-ordination on suitable sites. The problem is essentially a matter for decentralisation, and recourse should be had to architects and builders trained in the particular localities concerned. A variety of persons would thus be engaged with special knowledge of every district throughout the kingdom, such as would be impossible, even if desirable, to collect within any State department, and an immense amount of ability would be focussed upon this vitally important subject, acting in direct contact with the people themselves. The decentralisation that would ensue would conduce to the more even distribution of labour and employment, whilst wholesome rivalry would be engendered amongst architects, amongst builders, as amongst the different villages and towns. A host of other advantages would accrue, one of the most important being that the cost could be more effectually checked and controlled than is usually obtained from a Government department.

That this has been recognised by Sir Tudor Walters' Committee is clearly shown in their report issued after twelve months of exhaustive investigation and study.

"War experience has shown what can be done in the way of large production by the combination of central guidance and control with local initiative, and there can be no doubt that if the building of houses were to be organised in the way that the production of munitions has been organised, a very large number could be erected at a reasonable cost. There are, however, far too many local considerations in connection with house building for so completely centralised an undertaking of the work to be desirable, but we are convinced that many of the advantages of centralised guidance and organisation can be, and should be, secured for this work; and that these advantages may be obtained without involving any undue interference with local freedom or control over the character of the work in all matters where local initiative and responsibility are desirable."

. . . "It should not be necessary for new systems or methods to be tested in each locality, but results obtained in one locality should be promptly placed at the disposal of all. Only by such centralized guidance can questions of the supply of scarce material, the co-ordination between the supply and demand for labour and kindred matters be properly regulated and different districts prevented from competing with each other and interfering with each other's work."

. . . "It will be obvious that such functions cannot be adequately exercised directly from London, that the work must be decentralized, and that local representative or commissioners having the necessary staff must act on behalf of the central authority, must keep in close touch with all who are building in their districts, and must acquaint them of improvements in plans, structural details and systems of costing or organization which may be reached through experience in other districts."

The whole report goes to show that this Committee regards the State as an administrative and not as an executive body, and that decentralization rather than centralization is the policy to be pursued.

It is an especial characteristic of this housing question that it will affect practically every part of the Kingdom, as it will certainly have an influence over every individual in the land. The appearance of the most unspoilt, the most cherished retreat, is liable to be modified, changed and perhaps entirely metamorphosed, and no town or village is likely to escape its impress. Much of the interest of the domestic architecture of the past is so instructive, so subtle and delicate in its spirit, so interesting in the individual taste portrayed, that it breathes a continuous lesson to all who enjoy native art. Houses and cottages regarded as permanent homes, were designed with a loving forethought and care, and followed the closest contact between those most concerned, so that the mutual labours of owner and craftsman endued their works with an almost human personality.

Too many of the houses of more recent years have been limited to the mere provision of accommodation without the slightest evident preoccupation for the creation of beauty. The ill-advised labours of ill-educated and illiterate speculators has been deemed sufficient for the needs of the people, and low-priced labour and cheap construction have gone hand in hand. Nor has the much vaunted scientific skill and extraordinary mechanical knowledge of our times, as applied to the domestic architecture, produced anything so pleasing and so happy in relationship to its surroundings as was evolved by the more simple process of the days gone by. Even in matters of construction, the stringent by-laws enforced by rural and urban district councils have resulted in the erection of little that promises to be more enduring than what was built without control.

The desire to be of helpful service to the community, to make the lives of the people healthier and happier, has not been treated as a definite objective. Housing as carried out under such an unenlightened policy was bound to have baneful results, and has inevitably produced the miserable collections of hovels and slums that discredit so many nameless builders (save the mark!) and industrialists who were responsible for their creation. The prospective scheme of housing is admittedly a vast undertaking, and if it is to be successfully accomplished it will require the closest and most constant collaboration between those who are to be responsible for the buildings and the representatives of those who are to be housed.

It is only by the personal knowledge of the immediate local conditions that success will ensue. The lives and circumstances of those catered for must be sympathetically entered into, their traditions and aspirations must be thoroughly understood. Local customs, local materials, local variations of climate—all have a more profound effect upon building than is generally realized.

Advice and guidance from a central authority is undoubtedly desirable, but the maximum of individual freedom must be allowed. Living architecture, like living organisms, can only spring from intimate union between the individuals who are directly concerned in their creation and who are united by mutual regard.

NOTES.

Sir Aston Webb, P.R.A.

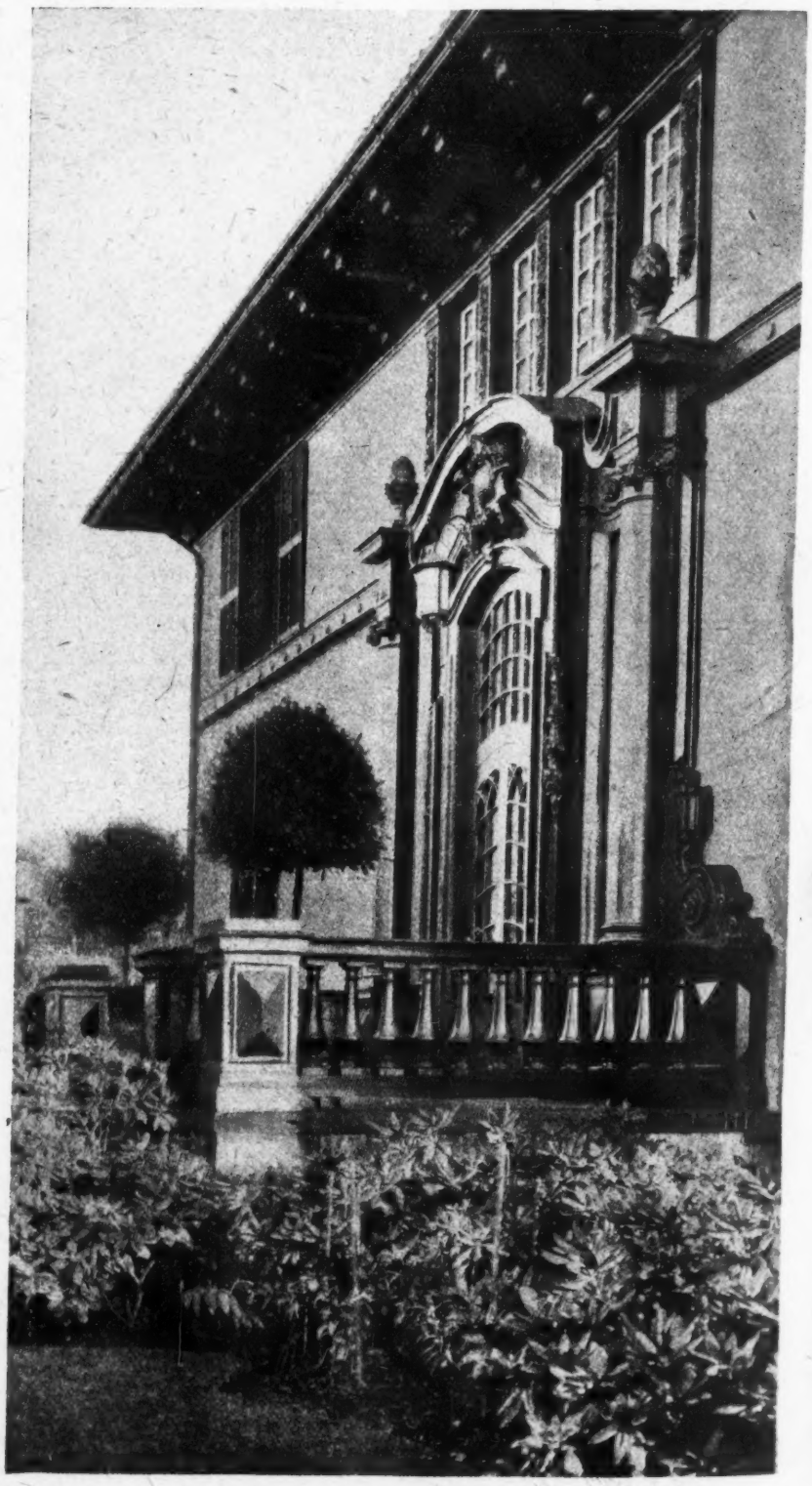
THE choice of an architect as the President of the Royal Academy is an event of the greatest interest and satisfaction to the architectural profession, on which all concerned are to be congratulated. The election should do much for the art of architecture, which may yet receive its proper recognition from the general public as the chief of the arts, while from the Royal Academy itself may now be expected a more sympathetic regard for architecture than has been noticed in the past. The honour which has been conferred on Sir Aston as a man and an artist is shared by architects generally, while the Academy is to be congratulated on breaking with tradition and electing as its President neither painter nor sculptor, but one who possesses an intimate knowledge and appreciation of the arts, as well as those personal qualities which should make a successful and popular President. To Sir Aston himself this signal honour is the crowning achievement of an already great and honourable career, and the whole profession and his many friends will congratulate him on this high and well-deserved honour, and in those congratulations we heartily join.

Critics in Architecture.

MR. ARTHUR HARRISON, F.R.I.B.A., the newly-elected President of the Birmingham Rotary Club, recently made some excellent remarks in his inaugural address to members of the club. Perhaps his most interesting observation was in reference to the importance of a correct judgment on the part of the public as to architecture. In the many proposals which have been made for educating the public to an appreciation of the art, we do not remember such a suggestion as he makes for the attainment of this end, and we cannot do better than quote Mr. Harrison's own words: "If we had a critic of architecture as widely read as our well-known musical critic, he could stir the public to a perception of what to look for and demand. When we consider that it is an art which is of daily concern to mankind, it is deplorable that it suffers complete neglect by the Press. We have critics who guide us to the right books to read, tell us what poetry to avoid, what pictures we should talk about, but in no regular department of the newspapers do we find a criticism of architecture telling us how our cities should be designed and what houses we should build. The public naturally does not consider it, because it is never presented." We commend these remarks to the consideration of the various committees and writers who are now considering the education of the public in architecture and the reconstruction of the architectural profession.

Civic Societies.

WE are hopeful that the necessity for beautiful buildings and well planned cities and towns will be generally recognized and practical steps taken to secure them in the near future. One hopeful sign is the founding of civic societies in some of our large cities, of which Birmingham is one. With the new spirit which pervades our public life, much can be done by societies composed of artists, architects, engineers and other men known for their public-spirited sympathy, and we hope that all our large towns will soon have their civic societies. As Mr. Harrison said, in the address referred to above, "When the arts were loved and practised, there was the



From the "American Architect."

House, Newton Center, Mass: Detail of principal entrance.

MESSRS. COOLIDGE & CARLSON, ARCHITECTS.

truest indication and unerring witness that all was well morally and physically with the conditions and surroundings of the people."

The Housing Question. AMONGST the written contributions to the housing question, which are so numerous and so overlapping, our readers should not overlook the printed report of Mr. Rowntree's paper to the Society of Arts on December 4. This contains a great deal of clear, sensible statement, and the remarks of those who followed the reading of the paper also give food for thought. The reference by Mr. Frederick Litchfield to the report issued by a Treasury Committee on currency and foreign exchange is a timely one. He said: "Having regard to that report if the Government declared itself in favour of building houses, the Treasury would at once say that there was no money available for the purpose. The caution advised by the report was particularly applicable to far-reaching programmes of housing and other development schemes. It was essential to the restoration of an effective gold supply that the money for capital expenditure should not be provided by the creation of new credit. The shortage of real capital must be made good by genuine saving, and it could not be met by the creation of fresh purchasing power in the form of bank advances to the Government."

The Birth-rate and Housing. WE have just been informed that in a certain populous district of London, the number of children of school age has fallen thirty-three per cent. since the beginning of the war and one cannot help wondering, if such a state of things is general, how it affects the housing question. The diminution in numbers attending school may not be all attributable to a lessened birth-rate, but there are certainly numbers of educated people who believe that the urgency of the housing question has been considerably exaggerated and that there is a serious danger of too many houses being built in wrong places. It is said that "no attention ought to be paid to the cost of building," for, if people lived in unhealthy houses, the Treasury has to pay in another way by providing hospitals, lunatic asylums, prisons, and workhouses.

Prices for Land for Housing THE prices quoted for building land which might be available for housing purposes, disclose some curious anomalies. In Carlisle, £1,500 an acre, at Penzance £75 an acre, at Chiswick £600 an acre, and a certain Local Authority asked £1,800! Prof. Adshead has, however, pointed out that the difference caused by putting only 12 houses on the acre as against 50, if at £500 an acre, only adds 9d. a week to the cost of each house, if a more moderate width of road be accepted.

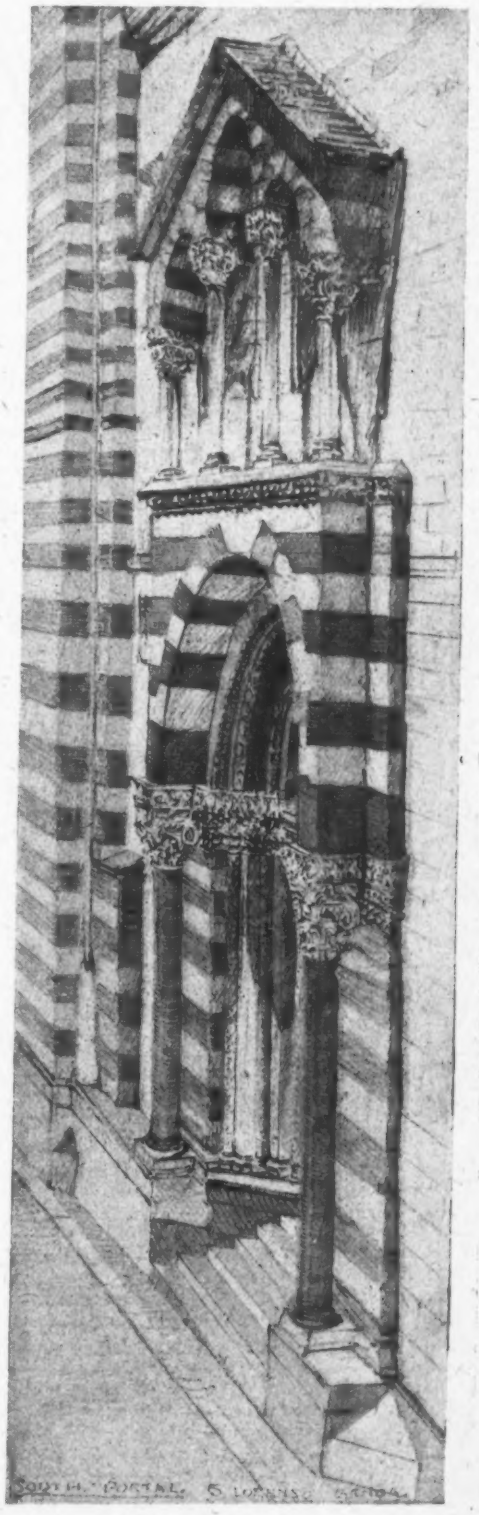
British Scientific Products Exhibition. THE report of the British Scientific Products Exhibition, 1918, which has just been issued, indicates something of the undoubted value of the exhibition and a promise of its becoming an annual event. At all events, one is to be held this year, and we shall expect to see the list of donations largely increased from the £4,833 11s. of last year, or an adequate amount of Government support. We feel sure that the time is ripe for great efforts on the part of the British Science Guild to still further increase its power for good.

Proposed College of Estate Management. AN appeal is being made by the President and Council of the Auctioneers' and Estate Agents' Institute for funds to found, build and endow a college of estate management. Included in the objects of the college are the following:

To found a corporate body to provide a professional training for students who intend to follow the calling of an estate agent or auctioneer and all concerned in managing, developing and dealing with land and property, such training being the necessary supplement to the experience gained during articles or otherwise in the office of a practitioner; to provide free technical education; to prepare candidates for the examinations of the various professional institutions and for the B.Sc. (Estate Management) Degree of the University of London; and to encourage, by all educational methods, the study of all subjects pertaining to land and property.

It is considered essential that the headquarters of the proposed organization shall be housed in a prominent position in London. It is proposed, therefore, to acquire a site and to erect suitable buildings. The Auctioneers' and Estate Agents' Institute is desirous of finding a permanent home, and it has been suggested that the college and the institute shall be housed under the same roof. This will afford an opportunity of erecting a more important building than would be possible if the two were separate. The two portions of the building will be independent and self-contained. At the headquarters of the college, there will be, during term time, continuous day courses, evening courses, and a complete system of teaching by correspondence. We wish the scheme complete success.

The Bolton Competition. WE have looked through the conditions of the Cottage Competition for the housing of the working-classes, promoted by the Housing and Town-Planning Committee of the Borough of Bolton, and we cannot say they offer much encouragement for architects to compete. There is no mention of the names of assessors, and the designs are to be purchased outright for small premiums ranging from £10 to £25. Such sums offer no appreciable reward for really good or original designs. We look in vain for any clause which might promise a percentage or royalty on any cottages the Corporation might build from the premiated designs.



South Portal, S. Lorenzo, Genoa.

Drawn on the spot by MR. D. BARCLAY NIVEN, F.R.I.B.A.

CORRESPONDENCE.

Retford Borough Architectural Appointment.

SIR,—With reference to your approving note in last week's *Builder* on the appointment of Mr. Bromhead at Retford, I would like to ask one question. Is Mr. Bromhead simply the assistant of the borough engineer, or has the Council created a new office? If the latter is the case, all honour is due to the Council for its far-seeing views. If the former is the case, the Council is following a mistaken course—and one not in the spirit recommended by the report of the Government on "Housing Schemes."

J.H.M.

[We hope that we shall receive some confirmation of the better condition that the Council have created a new office.—ED.]

The Restoration of Penny Postage.

SIR,—May I be permitted to recall to your readers' attention the important resolution lately passed at the meeting of the London Chamber of Commerce dealing with the present postal and telegraphic conditions? The Council here took a very firm line in the public interest upon these questions, and placed first in importance the return to penny postage.

Though raising no objection to its alteration when war conditions could not be estimated and commercial enterprise was held back, the Council pointed out that circumstances no longer justified this increased postal charge. At a moment of Reconstruction like the present this is a grave hindrance; and the Council here spoke—it may be fairly claimed—in the name of the whole British community.

It may be possible for social correspondence to be eliminated or greatly reduced, and this is certainly being done: for business men it is otherwise, and the increased postal rate means a serious inconvenience and encumbrance. It will certainly have to be eventually withdrawn in the public interest; but that slow process of conversion of the official mind will be sensibly quickened if we can organise through the Press a strong effective public agitation in support of the admirable initiative taken by the London Chamber of Commerce.

A READER.

Grading of Workmen in the Building Trade.

SIR,—I was pleased to see the interest taken under this heading. I hope by making a few remarks I shall not offend "Bricklayer." Should it be left to a foreman to start a man and place him on the *front* of a building? And surely he is wrong in stating bricklaying to be the trade "wherein incidents of this nature are most likely to occur."

The trade where incompetence is mostly found is undoubtedly painting and decorating. Experience will readily allow that this branch of the building trade requires as much time and brains to learn as any; yet something like 50 to 80 per cent. of the work can be done by anyone with strength and the will to do it.

For instance, wash off and distemper ceiling: anyone in a month. Design, cut and apply, stencil and line around same: mechanic required. Again, rub down and paint coach-house, as against properly preparing and painting with decorative designs, drawing-room, or imitating various woods, &c.

Then, as to tinting, both paint and distemper, and the different vehicles proper for use in their many forms, many years of experience are required; in fact they are scarcely ever learned unless practically taught in boyhood.

Grading, yes, most certainly. Men who know their business in this branch of the building trade should be paid as high as any of the allied trades. Anyone solving this obvious difficulty would earn the gratitude not only of the men, but the employer and public who pay as well.

A Grade 1 man should give his best at any job. Certainly a man should not be the object of ridicule if not his fault; but if he spoils a job whose fault is it? surely not the foreman's. Should he not be able to do what other mechanics do if paid the same rate?

If we were graded the incentive would be to do the best. "Skill and technique" would soon show itself if encouraged.

G. J. HARVEY.

Condensation in Concrete.

SIR,—In reply to "Granite," in your issue of January 3, in 1906 I built as an addition to a cottage, a scullery and bedroom. I had a 4 in. concrete slab for the bedroom floor and a similar slab for the roof. Both were composed of natural gravel and cement gauged 5 to 1 and reinforced with indented bars. There has been no trouble with condensed water. From the first I recognised that a current of air near the ceiling would be necessary.

To attain this end I built the walls—which face north, south and west—with Fletton bricks, on edge, with 1½ in. cavity. The ties consisted of lattice girder fencing wire every fourth course. I also built a separate flue for ventilation by the side of the ordinary chimney; both flues have simple anti-down draft pots, which cost 2s. 6d. each.

On the outside of the wall, just above the ground-line I put four perforated bricks, one at each corner, and the same arrangement at the level of the bedroom floor.

On the inside I put four perforated bricks, and these were as near the ceiling as possible. Four under the scullery ceiling and four under the bedroom ceiling.

Just below the ceiling two perforated bricks were built into the air flue. I had some doubt as to whether the one flue would do for the two rooms, so I asked Mr. Grundy of City-road if the arrangement would work satisfactorily and he said it would. I also had a pipe from the washing boiler to chimney to take off the steam. The result has been all I could wish; the walls are as dry as a bone and never has there been any trouble with condensed water after the initial set. It does not leak in any way. I consider that a concrete cottage would be very unhealthy to live in unless some means of ventilation are adopted by means of which the air near the ceiling is frequently changed, and the system I have outlined cost only 2s. 6d. for chimney pot. All the work, including the flues, was brick on edge built in cement.

Another roof of reinforced concrete we put on in 1876 did not condense, but this was because breeze concrete was used, and in this connection Mr. Swain, the architect of the celebrated Rowntree College at York, says that he always uses 1 in. of ash concrete for bottom side of slabs. The reinforcement consisted of 2 in. by ½ in. iron bars on edge, placed about 18 in. centres, and some ½ in. round rods through holes in the ½ in. bars about the same distance apart, and we put the reinforcement as near as we could in the middle of the slab.

This was copied from an older roof, and no one at that time appeared to know any better where to place the reinforcement. The older roof was copied from an old reinforced beer cooler, which I imagine was made between 60 and 70 years ago.

C. F. MAYFIELD,
Borough Surveyor,
Godmanchester, Hunts.

SIR,—The condensation trouble which your correspondent "Granite" appears to have experienced with the concrete roof of his scullery is probably due to the use of a dense and impervious plaster in an apartment in which the air is heated to a considerable degree by the gas cooking stove and, on washing days, contains an excess of moisture from the copper. In such situations, where a dense concrete is used for walls or roof, the interior plaster should be of a porous nature in order that the moisture may be absorbed instead of condensing on the surface. If the concrete itself forms the surface and is of a porous nature (as is often the case in the inner leaf of a cavity wall) the trouble does not arise.

T. J. CLARK.

SIR,—Referring to "Granite's" query in your issue of January 3, I think the method adopted for coating the underside of the steel decks of passenger ships forming cabin ceilings, etc., might be worth trying.

These "ceilings" receive a coat of thick white paint which, while wet, is well covered with granulated cork similar to that used for packing grapes.

The cork can be easily applied from a rough box, say, 9 in. by 9 in. by 4 in. deep, provided with a false bottom with a short handle projecting through a suitable hole in the bottom of the box.

The box, filled with cork, is held up to the ceiling, the false bottom pushed upwards by means of the handle causes a portion of the granulated cork to adhere to the paint. The ceiling should be well covered, and after all is dry it may be painted as required.

The finished effect is quite pleasing. I have found this effective in preventing condensation on iron cold water pipes passing through warm rooms, and it would be interesting to hear from "Granite" if he is able to overcome his difficuty in the manner suggested.

QUERNMORE.

Housing of Workmen.

SIR,—I have been interested in the various designs published in your Journal for housing of workmen, and there are two points which impress me as being necessary and not sufficiently considered.

1. Height of rooms, especially of ground floor: These should never be less than 9 ft. floor to ceiling for adequate air supply and ventilation.

2. Number of bedrooms: There should never be less than three, in common decency, and each should be of sufficient size to accommodate at least two beds with ordinary necessary furniture, and one should be large enough for three single beds, occupying each 7 ft. by 3 ft. of floor space. Ordinarily a family may consist of five children of two sexes, and, although for a matter of four or five years the youngest may occupy a cot beside the double bed of the parents, the time will arise when all the children have to be provided for in not less than two bedrooms when the sexes should be separated.

Even the premiated designs, Class A, published in your Journal, show two bedrooms with apparently only space enough for one bed in each; one is disposed to enquire if it is usual for two or three children to sleep together in one bed in England.

Here for workmen's cottages we use the single-story type, and have 10 ft. from floor to ceiling; three bedrooms of which the smallest is 12 ft. by 11 ft. or 13 ft. by 10 ft, and preferably we have a kitchen in addition to living room as latter becomes too warm with cooking taking place in it.

Nearly all my workmen use one room for a parlour or sitting-room, and I consider provision should be made for such where smoking and chatting may take place while dining-table is being occupied by meals or children's school work, &c.

ALF. D. TUDHOPE.

Cape Town.

Grange-over-Sands Cinema Competition.

SIR,—You were kind enough recently to insert a note in your journal requesting members of the Society not to take part in this competition without first ascertaining from the Secretary that the Society had approved the conditions. I have just received a note from the promoters, with whom I have been in negotiation, that on further consideration of the matter they have decided to cancel the competition.

C. MCARTHUR BUTLER,
Secretary, Society of Architects.

GENERAL NEWS.

Competition for Laying out the Pineapple and Fordhouse Farm Estates, Birmingham.

The Competitions Committee of the Royal Institute of British Architects request Members and Licentiates of the Institute not to take part in this competition until a further announcement is made that the conditions have been brought into conformity with the Institute regulations.

Birmingham and Bolton Housing Competitions.

Members of the Society of Architects are requested not to take part in these competitions without first ascertaining from the Secretary of the Society that the conditions have been approved by the Council.

York and East Yorkshire Architectural Society.

At a meeting of the York and East Yorkshire Architectural Society, held on the 14th inst., Mr. L. Kitchen, F.R.I.B.A., was elected President for the current year, and Messrs. P. Gaskell and F. T. Penty were elected Fellows of the Society.

Royal Scottish Academy.

At a meeting in Edinburgh the members of the Royal Scottish Academy recently elected Mr. J. Lawton Wingate President, in the room of Mr. James Guthrie, who recently retired. The new president's work has been almost exclusively confined to landscape painting. He was elected A.R.S.A. in 1879, and R.S.A. in 1886.

Builders' Foremen and Clerks of Works Institution.

Meetings of the Provident Institution of Builders' Foremen and Clerks of Works, of 9, Conduit-street, W. 1, will take place on the third Wednesday in each month at 7 p.m. on the following dates:—February 19, March 19, April 16, May 21, June 18, July 16, September 7, October 15, November 19, December 17.

Cardiff City Engineer.

Cardiff Public Works Committee have resolved to recommend to the Council that the City Engineer, Mr. E. J. Elford, be also designated architect. In their housing scheme they might, said the chairman, employ architects or not, but the proposal would place the Council in a better position. Mr. Elford said that it was somewhat of an anomaly for him to have to sign architectural plans as Borough Engineer.

Restoring the Highways.

The Government road and bridge programme for 1919–20 will, it is expected, provide employment for many demobilised men in Kent. The Road Board have represented to the Government that the most useful kind of road work required at the present time is the strengthening, reconstruction, and re-surfacing, with improved materials, of important roads and bridges in Great Britain, and for this purpose the Government have allocated £10,000,000, the distribution of which will rest with the Road Board.

Commander of the British Empire.

Mr. J. W. White, of Sunderland, who has been appointed a Commander of the British Empire Order, is a past President of the Northern Counties and also of the National Federation of Building Trade Employers. He has a seat on the Sunderland Town Council, and since the war began has served on the committee appointed to investigate industrial unrest in the Midlands, and of late has been engaged on the Committee on Production.

Appointment.

Doncaster Highways Committee have appointed an architectural assistant in the Borough Surveyor's office in succession to Mr. C. Waterhouse, who is leaving. There were three candidates before them, and Mr. H. J. Ward, of Doncaster, was appointed. Mr. Waterhouse, who is leaving to take up an appointment in another town, has been presented with a gold watch and chain by the officials in the various departments.

Workhouse Buildings, Colchester.

At a meeting of the Colchester Board of Guardians, on Tuesday, January 21, it was decided to consult an architect with regard to a reconstruction of the Workhouse buildings.

Southampton Docks.

It is stated that big developments will take place at Southampton in the future, but at the moment the position is obscured by uncertainty as to how long the Admiralty will continue its control of the docks. Messrs. Harland & Wolff are pressing forward an important extension of their works. New shops are being erected to allow an expansion of the facilities for dealing with all branches of repair and overhaul work.

Architectural Association of Ireland.

At a meeting of the Architectural Association of Ireland, on January 9, with Mr. M. J. Burke in the chair, a paper on "The Cistercian Monastery and its Plan" was read by Mr. Harold G. Leask. The lecturer described the general arrangement and details of the plan of a typical Cistercian monastery, and the various practical considerations and details of the monastic life which affected the lay-out of the buildings. He showed on the whole a Cistercian abbey to be a piece of practical and commonsense planning, in thorough keeping with the order and regularity of the monastic rule of life and in many ways far in advance of the other dwellings of the time. The lecture was illustrated by numerous lantern slides.

A Manchester Town Plan.

A town-planning scheme of far-reaching importance is engaging the attention of a special committee of the Manchester Corporation. For many months a sub-committee of the Town Planning Special Committee has been at work formulating a plan for the betterment of the southern side of the city, embracing Withington, Didsbury, West Didsbury, Fallowfield, Chorlton-cum-Hardy, Levenshulme, Openshaw, Clayton, and Gorton. Altogether the area mapped for improvement is 5,290 acres. It is proposed to make new roads and widen old ones, and to lay out the land for building purposes so as to help to relieve the house shortage from which the city is suffering. Many building and constructional schemes are involved, and sites are provided for allotments, playing fields, schools, and hospitals. The new roads are to vary in width from 42 ft. to 100 ft. and one of the larger is to run from Slade-lane to Cheadle.—*Manchester Guardian.*

School War Memorials.

At a recent meeting at the City of London School, Sir Robert Chalmers moved that the school war memorial should include the provision of a permanent record to commemorate the part taken by over 3,000 old boys in the war. Sir Louis Newton seconded the motion, which was carried unanimously.

A Requiem Mass was celebrated recently at Farm-street Church, W., for the repose of the souls of the Stonyhurst men who have fallen in the war. After the Mass a meeting was held at 114, Mount-street, in connection with the war memorial. Mr. T. E. Lescher (chairman of the Executive Committee) stated that the sum required to carry out the objects in view would not be less than £20,000. It was proposed to establish facilities for the education at Stonyhurst of the sons or dependents of those who had fallen. Then they wished to set up at the college a commemorative memorial. Next, they proposed to erect and equip a science laboratory at the college on a scale adapted to meet the requirements of this branch of study after the war.

MR. Arthur KEEN, F.R.I.B.A., presided on Monday at 9, Conduit-street, over a general meeting of the Royal Institute of British Architects.

Mr. Guy Dawber announced the decease of the following members:—Fairfax Blomfield Wade-Palmer, elected Associate 1882 and Fellow 1888; William Norman Pogson, Fellow, elected 1891.

The Making Habitable of Old Dwellings in Town and Country.

Mr. M. H. Baillie-Scott, in the course of a paper on the above subject, said:—"The title of my paper is 'The Making Habitable of Old Dwellings in Town and Country.' By 'making habitable' I understand that we are to mean something more than the fulfilment of material needs, and are to suppose some intelligent appreciation of the qualities of the building art on the part of the occupants. And what do we mean exactly by old dwellings? May I take it that we use the term in a sense distinctly Pickwickian—the special meaning which architects convey when they talk about 'old work,' in which the mere passage of time is in itself quite a negligible quantity. In old work we chiefly, I think, consider a certain aesthetic rightness and beauty expressed in practical ways which, as a method of expression in building, was gradually done to death in the early part of the nineteenth century, and which we have been struggling to recapture again ever since with so far small success. Indeed, whatever isolated architects may have achieved in odd corners, it must be confessed that the gradual trend of house building has gone from bad to worse up to the present time. We used to think that there could not be much worse building than the mid-Victorian houses until the artistic villa arose in our midst and showed us our mistake. And now to such a state have we come that any man who has any 'house sense,' if I may coin the term, may consider himself fortunate if he can find for himself a dwelling which is not absolutely revolting to all his instincts. It is perhaps fortunate in these circumstances that so many people have not developed the house sense and so are quite pleased with their highly artistic residences. But the curious result of this disappearance of the building art at the approach of our modern civilisation is that in dealing with old residences in these days we find ourselves in a position which has probably never occurred in the world before. In former times it was quite a simple affair. The builders of the day made their alterations and additions in the manner of the day with ruthless disregard of the older work. The latest and most up-to-date ideas seemed to have been always considered the best, and the old builders destroyed and obscured old features because they knew, or thought they knew, that they could do better. And so we often find old houses which are pocket editions of the histories of the past. The modern wing is usually a blot, the Victorian addition is depressing, the Georgian and Queen Anne work impresses us with its scholarly diction and good grammar, but it is not till we get back to the work of the earlier builders that our hearts are touched and thrilled by the strange charm of the building art as then practised. This being so, we cannot

like the builders of the past, make our modern contribution to the old house without fear and trembling. The best we can do is to sit at the feet of the old builders and try to build as they did. To attempt to account for this humiliating state of affairs would lead me too far away from the subject in hand. I can only say that, in my view, building as an art differs from other arts mainly in this—that it is the expression not of an individual, but of the community as a whole, and so the badness of normal modern building seems to indicate something radically wrong in the modern social system which secretes it. Building, indeed, like the fever chart of a patient, automatically and remorselessly records the conditions of the social state and we can only really obtain any good building again as a normal national expression when the conditions of the social state are changed, and the state of our national health improved. In the meantime we architects must do the best we can in the world as we find it. Perhaps the best we can do in dealing with an old building is to absolutely efface ourselves and to let no modern note disturb the harmony of the old work.

"But before proceeding further to the consideration of this philosophical aspect of the question, it will perhaps be more useful to deal with certain practical matters which arise in making old dwellings habitable. If I do not enlarge in detail on practical questions, it is because, in addressing architects, I feel I can add little that is not commonly known to us all and covered by our routine methods.

"I suppose the one outstanding practical defect in old buildings from the modern point of view is the absence of a damp-proof course, or, indeed, of any attempt to cut off the building from the ground on which it was built. I have heard it argued that there is a certain virtue in the contact with mother earth—magnetic currents on which the healing powers of mud-baths depend. I daresay some of our soldiers returning from France might have something to say about that, and in our modern practice we not only ask for damp-proof courses in our walls, but for a continuous bed of concrete under the whole floor area of a house. The first thing then that we have to consider in making an old house habitable is the prevention of damp rising from the ground through walls and floors. It is, of course, possible, though somewhat expensive to insert a damp-proof course in an old wall; but I think if all soil is removed from the sides of the walls and air drains introduced, so that only the actual sole of the footings is in contact with ground, and if the site itself is likewise well dressed, the absence of the damp-proof course will be scarcely felt. If, in addition to this, the ground flooring is taken up and a bed of concrete laid under it, the question of damp rising from the ground will be effectually disposed of. If we next consider the question of damp penetrating walls, it may, I think, be taken as a general axiom that it is generally best to stop this outside the building. One is often disposed to allow the damp to penetrate a wall and stop it from showing indoors by plastering on battens, but it always seems more satisfactory to keep it outside altogether. Thus, in the case of old half-timber work which was only four inches thick, in an old Kentish house in an exposed position, I used the old method of hanging the exterior face of it with tiles—not in the usual mechanical modern way, but with such irregularities as naturally occur when the workman does not deliberately spoil his work by taking endless pains to make it appear as if it were done by a machine. Then it becomes possible to let the half-timber work show inside the rooms, and when in doubt I always feel inclined to take care of the inside of a house and to some extent to allow the exterior to take care of itself; for I think we are too often apt to fall into the error of thinking of the exterior of a house as a thing by itself, to be composed and arranged on æsthetic principles, whereas, I believe, perhaps the most vital quality the exterior of a building possesses is a kind of unconscious sincerity as the resultant of a conception which has mainly been concerned with the interior. And thus the pleasure we derive from looking at the exterior is something more than a shallow appreciation of superficial things, but consists rather in the hints it conveys to us of inward beauties.

"In dealing with old stone walls which are damp, I have a great belief in external colour wash, mixed with Russian tallow. This gives a waterproof coat, which still displays the characteristic texture of the stone with all its varied planes slightly softened, so that you get a bit of sky reflected from one plane, and a bit of grass from another. I have seen cottages on the West Coast entirely colour washed, slate roof and all—some white, some pink, and others buff or deep orange, with excellent effect, both practically and artistically. If cement is used or rough-cast, the characteristic texture of the stone walling is lost. In all such matters it seems to me the architect should try to find a way of reconciling use to beauty. In the work of the old builders we constantly find methods of workmanship which please us, partly because they are so sensible and practical, and partly because they are beautiful. And this kind of practical beauty always seems to me the essential thing in building. It is no use telling me that if a thing is fitted for its purpose it is beautiful. If, instead of colour washing an old stone wall, we have cemented it, even to a nice level surface, ruled in with lines to represent joints, it would answer the purpose well enough, but all the beauty and interest of the wall would be lost. One does not object to practical and scientific ways of doing things. We are bound to be practical, but we must be something more unless building is to sink into what Carlyle called a mere beaverism. And so when practical merits are claimed for ugly methods, we must urge that the problem is only half solved. Such work is not worthy of human beings, but only of beavers.

"In the case of brickwork which is absorbent, linseed oil applied externally when the wall is dry will fill up the pores, and in most cases this is preferable to silicate compositions, which provide only a perishable outer skin. Having made our floors dry and our walls dry, I need not trouble you with any further wrinkles as to the roof, any defect of which will yield to the routine methods of the text-books.

"The next practical matter which claims our attention is that of sanitation. Many old houses, especially those which have come down in the world, and have been cut up into tenements, require considerable cleansing. In such cases, floors should be taken up and all the hidden spaces of the houses completely cleansed and disinfected. It is in applying this process that treasure trove may be hoped for. Then there is the question of smoky chimneys and their cure, and the desire to preserve the old open fireplaces without discomfort. These can only be dealt with usually by a process of trial and error. In an old ingle I recently saw an old tin bucket with the bottom knocked out and hung up in the chimney. The owner assured me that when he moved this the fire smoked. In an old house in Kent recently restored, there was a great ingle fireplace with open chimney which never smoked. I believe this was largely due to the fact that the whole of the back of the ingle sloped gradually backwards, so that as the air which fed the fire struck the back of the recess, it was at once deflected upwards. Nowadays, we like to slope the back of our fireplaces forwards to preserve the heat, with the result that we preserve the smoke as well.

"In the artificial heating of old houses with such open fireplaces, warm air supplies will often be found preferable to the use of radiators. This does not answer very well if there is a very extensive ground plan; but otherwise if you bring in the cold air supply in the basement and moderately heat it by passing over the furnace there, and then take it in channels to gratings in the floor, it forms a supply of air to the fireplaces, which helps the draught up the chimney and, incidentally, relieves the strain caused by the pull of the fire on the house generally, and so tends to eliminate cold draughts. As gratings only in the floor are required, one is relieved of the problem of disguising the radiators.

"In dealing with a house which comprises a succession of different periods, I daresay we shall not be over anxious to preserve the Victorian work. But often we may find Georgian work covering up earlier Tudor features, and in such a case I think the treatment will largely depend on the relative interest of the particular work. No definite rule or principle can be formulated. But, at any rate, we shall be right in preserving the later work in preference to any conjectural reproduction of the earlier features. I can recall more than one example of good old seventeenth century fronts which have been replaced by what the old Tudor fronts were supposed to be like, with the result that the whole effect is that of a Wardour-street fake. This word 'fake' has an unpleasant sound, but in spite of that I want to attempt a defence of what I call judicious and intelligent faking in dealing with old buildings. Let me take the case of a piece of old oak furniture. What do we admire about it? I don't suppose we care much whether it was made yesterday or 500 years ago. Apart from the design, we appreciate mainly the quality of the workmanship, which has succeeded in expressing the character of the oak, and also the quality of the tone which has arrived as the result of many years of wear. There is one rule of art which I always swear by. It is Browning's saying, 'You may do anything you like.' And so I think if you like that tone of the oak and that character of the workmanship you are entitled to try and obtain it in new work. The methods used by the modern faker are very much the same as those used by many painters of pictures. Both are aiming at quality of tone, and both will on occasion put on a wealth of colour, rub it out again, and then repeat the process to obtain the desired quality. Needless to say, there is a bad kind of faking which fails to achieve its aims, but when faking is well and intelligently done, I think it justifies itself. I never can understand why in adding, say, to a Tudor house we should merely copy the features of the old work in modern cast-iron, machine-made workmanship. We ought, surely, to go to the heart of the matter while we are about it, and this is much more a matter of character in workmanship than anything else—real home-made work without a hint of the machine about it. I remember once adding a new room to an old house which it was generally believed by the local residents we were going to spoil. One of these, on being received in the new room, looked round and exclaimed, 'Well, at any rate, you haven't spoilt this dear old room.' It was actually all quite new, but there was really no intention to deceive. The aim was to achieve certain qualities of time and workmanship belonging to old work, and after all, *when* it was done, does not seem to matter very much. I don't think it ever does really matter. It seems to me that in the consideration of old work in these days we are apt to take extreme courses. Either we destroy some interesting building, or else we reverently preserve it as something too sacred for the human uses for which it was created. I like to see an old house ingeniously adapted to modern uses. I should like to see Haddon Hall as a going concern instead of an interesting derelict. It would require careful handling, but I think it could be done. Cowdrey Castle might well be built up again, too.

"The subject with which I have to deal includes the making habitable of old dwellings in town and country. I must confess I am more interested in country building than in town building. In one sense it does not seem to matter much what you build in a modern town. There is nothing to spoil in a modern town. When a new frontage is put up, say, in Oxford-street, we do not say 'Oxford-street is quite spoiled.' And if this is true of London, what can be said of Manchester and Birmingham and all the other ugly modern towns we have created? These places are too dreadful to

disfigure or to beautify. But in the country it is different. There are old villages still and beautiful country places still that we ought not to spoil with officially approved cottages, chopped up in blocks of four, like bars of soap. And yet even in the town there are still left little back streets of old Georgian houses which ought to be guarded and preserved against the modern town planner with his grandiose schemes. I do not know if I shall get any sympathy here for my dislike for the ideals of this latest portent of these times—the modern town planner. With true Prussian frightfulness, he loves to hack his way through the little streets, and make a colossal, interminable avenue of immense width, lined by buildings adapted for the use of supermen. The pedestrian in such an avenue will find the mere crossing of the road a gigantic undertaking, and his progress will be punctuated by trees recurring with the regular persistence of a nightmare. As for me, I like to see towns constructed on the scale of a man of the usual size, with streets of reasonable width. And if I want to look at St. Paul's, I would rather come on it suddenly on turning a corner than have it at the end of a great vista. Vistas are well enough, but they should be short ones, I think. It is much to be feared that our desire to commemorate our victory over the Prussian may lead us to express in building those very qualities we set ourselves to overcome.

"In the present congested state of London, which seems likely to continue, it is a pity that some use cannot be made of many of those large Victorian houses in streets like Gloucester-road for example. If these were transformed into flats they would give a great deal of much-needed accommodation. In such cases much may be done to camouflage the character of the structure by various devices, not only in structural decoration but in amusing colour schemes and interesting furniture. In the treatment of old Georgian houses in towns in these labour-saving days we must either put in lifts and other modern conveniences, or else substitute for the vertical disposition of the rooms a horizontal one—or in other words turn houses into flats. There are streets still in London of fine old Georgian houses which have now degenerated into slums which might well be restored to their old dignity. Some of those in Westminster have already achieved a destiny far beyond their dreams.

"Just as the modern world has so far failed utterly to supply us with little but vulgar furniture, so that we are glad to obtain the household belongings which the humblest cottage once enjoyed, so, too, we gladly accept the old cottages in town and country in preference to anything that the modern world has to offer us. If the building art were still practised as it used to be there ought to be nothing tragic in the destruction of old buildings in town and country. The real tragedy consists not so much in the destruction of the old as in the lamentable fact that we have lost the art of replacing it with something nearer to the heart's desire. Building in these days is practically a forgotten art, and is practised normally only as a brutal, mechanical trade. The real qualities of buildings by which they acquire definite personalities consist mainly of work in an instructive sense of proportion combined with a characteristic technique in the handling of materials. Nowadays, in substitute for this old work with all its subtle variations of line and surface, there is nothing but a cast-iron monotony of deadly mechanical regulation. This ideal of mechanical regularity invades our conceptions with the insidiousness of a drug. I think we architects should draw as much as possible freehand and ever with charcoal on brown paper to escape from the tyranny of the tee-square and to realise the characteristic qualities of lines and surfaces. The more mechanical methods may be admirable in the larger buildings, but variety and character of outline and surface are the very breath of life to the cottage. I suppose there are few of us who do not look forward with some dread to the forthcoming influx of workmen's dwellings. Few of them will be built by artists, and unless they are built by artists they will be a disfigurement to the country. Scientific and natural ideals are well enough so far as they go, but building is, and always must be essentially an art, and must be practised with all the affectionate care which the artist gives to his work. Here is a description by Tennyson of some old cottages:—

"Here was one that, summer blended
Was parcel bearded with the travellers' joy;
In autumn parcel ivy clad; and here
The warm blue breathings of a hidden hearth
Broke from a bower of vine and honeysuckle;
One looked all rose tree, and another wore
A close set robe of jasmine sown with stars;
This had a rosy sea of gilly flowers
About it; this a milky way on earth,
Like visions in the northern dreeners heavens,
A lily avenue climbing to the doors;
One almost to the martin haunted eaves
A summer buried deep in hollyhocks;
Each its own charm."

All that we should now sweep away at the smallest excuse in favour of a cottage with a sanitary dustbin at the back door. Not that I would underestimate the importance of sanitation, only but just now and then we ought to lift our noses out of the drains and look up to the heavens. And in these days especially we ought to be careful not to condemn cottages which might easily be made habitable. And more than that every old cottage and every old house ought to be treasured as object-lessons in the building art.

"Of all the tasks which fall to the lot of the architect I can conceive of nothing more delightful and interesting than the restoration of an old home. In the building of a new house one is so often surrounded by circumstances which are uninspiring and depressing. There is the featureless building plot with perhaps some adjoining artistic villas. And since the aim of the artist in building should surely be to build in some sort of harmonious relation with surroundings it is hard to say what should be done in such a case. But with the old house all these difficulties disappear. We have only to follow in the footsteps of the old builders, and it seems almost impossible to go wrong, because, lest we forget, the old house is always there to guide us. It is an object-lesson for the workmen to show exactly how the work should be done. We can point to a bit of old Tudor brickwork and tell our bricklayer to do work just like that. And then, when we begin to investigate, we become seekers for hidden treasure. Buried under modern plaster and wallpaper we may find panelling—we may even find tapestry. And as we go on with the work we fall more and more under the spell of the old building and approach nearer to the heart of its mystery, and so with our minds steeped in its silent influences, we begin to realise what building really is and what it has meant and may still mean in the advancement of the world in which we live. It is something so much more than a mere practical expediency. Rightly handled, it becomes a medium of the expression of great spiritual forces to mould and guide our lives.

Mr. H. Wills proposed a vote of thanks to the reader of the paper and said everyone acquainted with the work of Mr. Baillie-Scott knew that he had made a great contribution to the practice of building. Mr. Scott had referred in no complimentary terms to the town planning wave which was passing over the country, and he felt a great measure of sympathy with what had been said. He was afraid they were getting rather too much town planning than too little, and he hoped that some of the exceedingly grandiose schemes being put before them would die a natural death.

Mr. F. Hooper, seconding the motion, said Mr. Baillie Scott had dealt firstly with the matter as an artist, which they would expect. He did not know that the subject of wide streets came within the scope of the paper, but the whole subject dealt with was essentially an economic problem, and he would urge that it was a national problem. If the events of the past four years were going to have a marked influence on the history and welfare of the community, that community must be better housed than at present; but no politician could dream of rehousing all who were now ill-housed. They knew, however, there were a vast number of buildings which could be improved. Mr. Scott suggested they should look heavenwards, and it was owing to the fact that they had looked earthwards that was the trouble in many homes. The getting of light into a building required most careful study. With regard to London, the housing accommodation could be enormously increased if it was possible to improve the lighting. The difficulty, as every architect knew, was the leasehold system, which made the lessees hesitate to make alterations and improvements. The Institute was tackling the question of light, and if it could induce the legal profession to deal with this subject of leaseholds so that habitations could be improved, it would be a blessing.

The Chairman said he would have liked Mr. Scott to have given them some illustrations showing how he had tackled some of the problems. He knew many were difficult cases to deal with. In one place in Sussex he measured, the living room was only 5½ ft. high, and that house had been inhabited for 300 years. He had dealt with such cases by sinking the floor, but of course, in doing that, one got more into the ground. With regard to light, the windows were put low to keep them under the eaves. It was impossible to make many of these old buildings inhabitable unless drastic alterations were made. He had in mind however, one case where an old mansion was successfully dealt with. He spoke of Montacute House, in Somerset, an Elizabethan house with two wings and a central hall and gallery above. It used to be impossible to get from one wing to the other unless the person passed through the central hall, which was the living room. About 100 years ago an old manor house in the neighbourhood was demolished and the owner of Montacute House bought the material and built up a new front to the central hall and thereby was enabled to make a corridor which allowed passage from one part of the house to the other. Another difficult question in old houses sometimes was that of aspect. At Astonbury Hall, for instance, all the principal rooms faced north. If time allowed there were a number of points on which he would like to join issue with Mr. Baillie Scott. The lecturer wanted the workmen to be shown the old work and to be asked to produce the same thing. It was not possible. The 300,000 cottages required could not be built in that way, nor could city buildings, and they had to find something to take its place. It used to be the art of the builder, but now it was the art of the architect. Whilst he valued the old work, he could not go so far as to say he would reproduce it—the old spirit had gone and could not be recovered.

Mr. Baillie Scott briefly responded.

The Chairman announced that the next meeting will be held on Monday, February 3, when Sir Frank Baines will read a paper on "War Factories and Sheds: Their Construction and Adaptation to Future Needs."

[Mr. Maurice Webb was unanimously elected a fellow at the above meeting.]

Sheffield and Town Planning.

Although the Sheffield Corporation has not yet carried out any town planning schemes, it continues to make progress with the preliminary work. The annual report of the Improvement Surveyor shows that out of the 24,879 acres which make up the area of the city, 12,379 are available for further development and inclusion in town planning schemes. The Local Government Board has sanctioned the preparation of seven schemes, embracing 5,791 acres. Sanction to prepare schemes will be sought in connection with three more areas, covering 3,300 acres, leaving 3,288 acres yet to be dealt with. The three new schemes are:—Area No. 8, Meersbrook, Backmoor; area No. 9, Broad Oaks, Acres Hills; area No. 11, Sheffield Park, Elm Tree Hill.

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ILLUSTRATIONS.

Stepney Town Planning Scheme.

These illustrations are given in connection with the lecture which Mr. Thomas Mawson delivered last week in the Whitechapel Art Gallery, and a report of which appears on this page.

Overmantel, Sir John Lister's House, Hull.

The fireplace and overmantel illustrated by the drawing is from one of the oak-panelled rooms of the house of Sir John Lister, Mayor of Hull, in 1595. It was here that King Charles I was lodged and entertained in 1639, and here, also, Wilberforce was born in 1759. The building was subsequently used as a bank, and later as offices and warehouses. It eventually became the property of the Corporation by purchase, and has been converted into a museum. The restorations have been carried out under the City Architect, Mr. Joseph H. Hirst, M.R.S.A.

South-west Suburban Water Company Offices, Egham.

This illustration is a reproduction of the drawing exhibited last year at the Royal Academy of Arts. The contractors were Messrs. G. H. Gibson & Sons, of High Wycombe, Mr. Dunham acting as foreman throughout. The bricks used were from the yards of T. Lawrence, of Bracknell; the desks and fittings were supplied by Messrs. Sage & Co., of Gray's Inn-road; and the whole work carried out from the designs, and under the personal superintendence of the architect, Mr. W. Ralph Low, F.R.I.B.A., of 67, Basinghall-street, E.C.

MEETINGS.

FRIDAY, *January* 24.

Institution of Mechanical Engineers.—Papers on "Electric Welding," 6 p.m.

TUESDAY, *January* 28.

The Institution of Civil Engineers.—The Hon. Richard C. Parsons, M.A., M.Inst.C.E., on "Centrifugal Pumps for dealing with Liquids containing Solid, Fibrous and Erosive Matters." 5.30 p.m.

WEDNESDAY, *January* 29.

L.C.C. School of Building, Ferndale-road, Clapham, S.W.4.—Professor Beresford Pite, M.A., F.R.I.B.A., on "The History of Renaissance Architecture in Italy, France and England." Lecture IV. 7.30 p.m.

PROPOSED RE-MODELLING OF STEPNEY.

AT the Whitechapel Art Gallery on Friday last week, Mr. Thos. H. Mawson described and illustrated by lantern slides the designs recently prepared in anticipation of the re-planning of the borough of Stepney.

Mr. Mawson, in the course of his remarks, said that one mistake which seemed to be made by some prople who approached the subject of town-planning was that it was a scheme for immediately pulling down and rebuilding at ruinous expense the whole of a town or city. It was nothing of the kind. A town-planner laid down a policy of economic development. He was prepared to say if our English towns had been built according to plan fifty years ago, the rates in the country would have been 3s. 8d. or 3s. 11d. in the £ less than they were to-day.

Dealing with the problems in Stepney, Mr. Mawson said they were peculiar—not peculiar amongst London boroughs, but peculiar as compared with, say, provincial towns. London was composed of a great number of villages and small towns, which have grown one into the other, and in none of the boroughs was there any vacant land on which one could expand; but on the ground so closely built upon there was a certain population which must be maintained. He was prepared to say that no town-planner could win his way with any municipality if he proposed to rebuild the whole of the area on principles which he regarded as hygienic, economic, and so on; because one could not displace two-thirds of the population, even if, as a town-planner, one thought it best to do it. This was unfortunate, because he thought half our English towns would be infinitely better if they were destroyed. The destruction of Salonika would, in a few years' time, be regarded as an act of God rather than as a disaster, because there they were treating the whole site as if it were a clean sheet. In Stepney they had a railway—the London, Tilbury and Southend Railway—which intersected right through the centre of the borough. It seemed to him that this railway might just as well be placed underground. Many advantages, economical, financial, and aesthetic, would be gained by doing this. He was told that it could be connected with the Inner Circle Railway, and that this would increase the traffic to Southend by two-thirds. The London and Tilbury Railway rose like a huge rampart through the district, preventing light and air flowing from one side to the other. On either side there was the most terribly congested neighbourhood he knew, and something would have had to be done in any case owing to the ravages of phthisis. In Stepney, probably, there was less park area to the number of inhabitants than in any other town in England. Even the backyards had been built over and used as workshops. After removing the railway underground, he would construct in its place a boulevard 1¼ miles long and 135 feet broad. The district between this and the Thames would be opened out so as to afford better housing and allow of the river being seen. The lecturer thought "Stepney Greeting" would be a good name for the boulevard, after the style adopted in the United States. Mr. Mawson, proceeding, said th site values along this great arterial road were valued at £4,223, 000. If one said that the site value was only one-third of the whole, they would have 12 million pounds' worth of property along the boulevard, something worth making a rate for, and an income much greater, probably, than was derived from the whole borough of Stepney. Reverting to the hygienic state of Stepney, the lecturer said that the conditions of residence were indicated by a comparison between the ideal and the real. Under a hygienic system, one acre should accommodate 500 people, whereas in parts of Stepney there were 4,700 per acre. He added that the Edward VII Memorial Park at Shadwell would come into the scheme, and he proposed that the boulevard should be the site of a campanile which would form a memorial to inhabitants of Stepney who had fallen in the war.

EXHIBITIONS OF THE WEEK.

Ruhleben Exhibition. "Gardens of Romance," at the Fine Art Society.

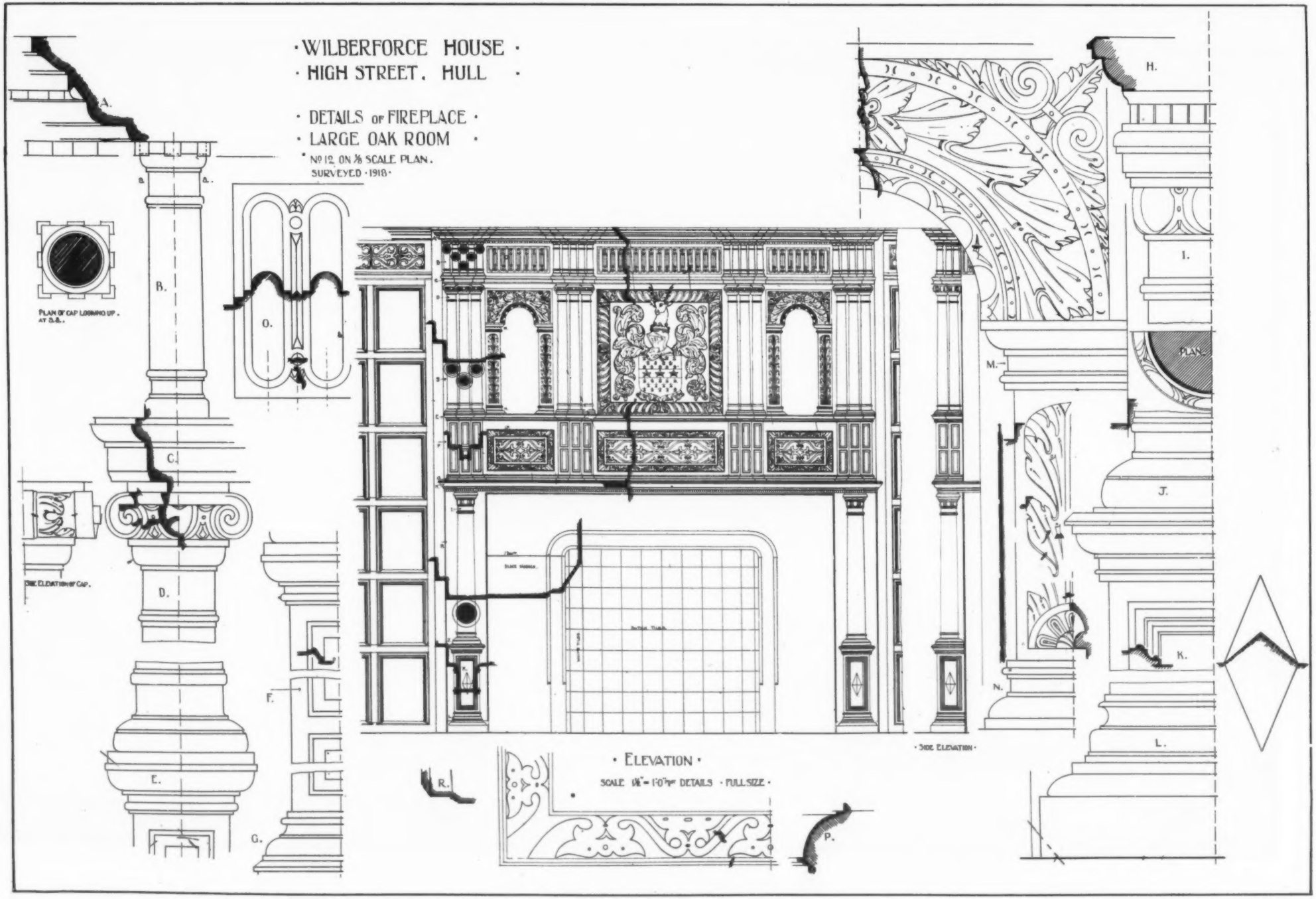
ONE of the most remarkable exhibitions which has owed its being to the war is that of the Ruhleben Prison Camp from 1914–1918, now organised within the Central Hall at Westminster. Even as an exhibition of art—of portraits, sketches, and still more of art handiwork in binding, leather and metal work—it has considerable merit and interest; but this feeling of interest is changed to astonishment and admiration when we consider the extraordinary conditions under which this work was produced.

We had the good fortune lately to attend a lecture by Mr. Ernest Pyke on life in the Ruhleben Camp, and the present exhibition came as a welcome illustration to many points in that address; but there were two which impressed themselves most directly upon us and received here the most ample confirmation. The first, which we shall not need to elaborate, was the absolute brutality of the German captors, who left these unfortunate civilian prisoners, whose only crime was to have been in their country, without any proper provision for food, sanitation, lodging, for the most elementary human comforts and even necessities. The other—and it is one of which every Briton may well be proud—that even under these conditions the spirit of our men remained unbroken; that out of them, little by little, and despite official discouragement, these men themselves evolved order, creative life, and a possible existence. Hope never left them in those years. They could joke at their fate and their gaolers; and the man who can go on smiling is unconquered, and indeed unconquerable.

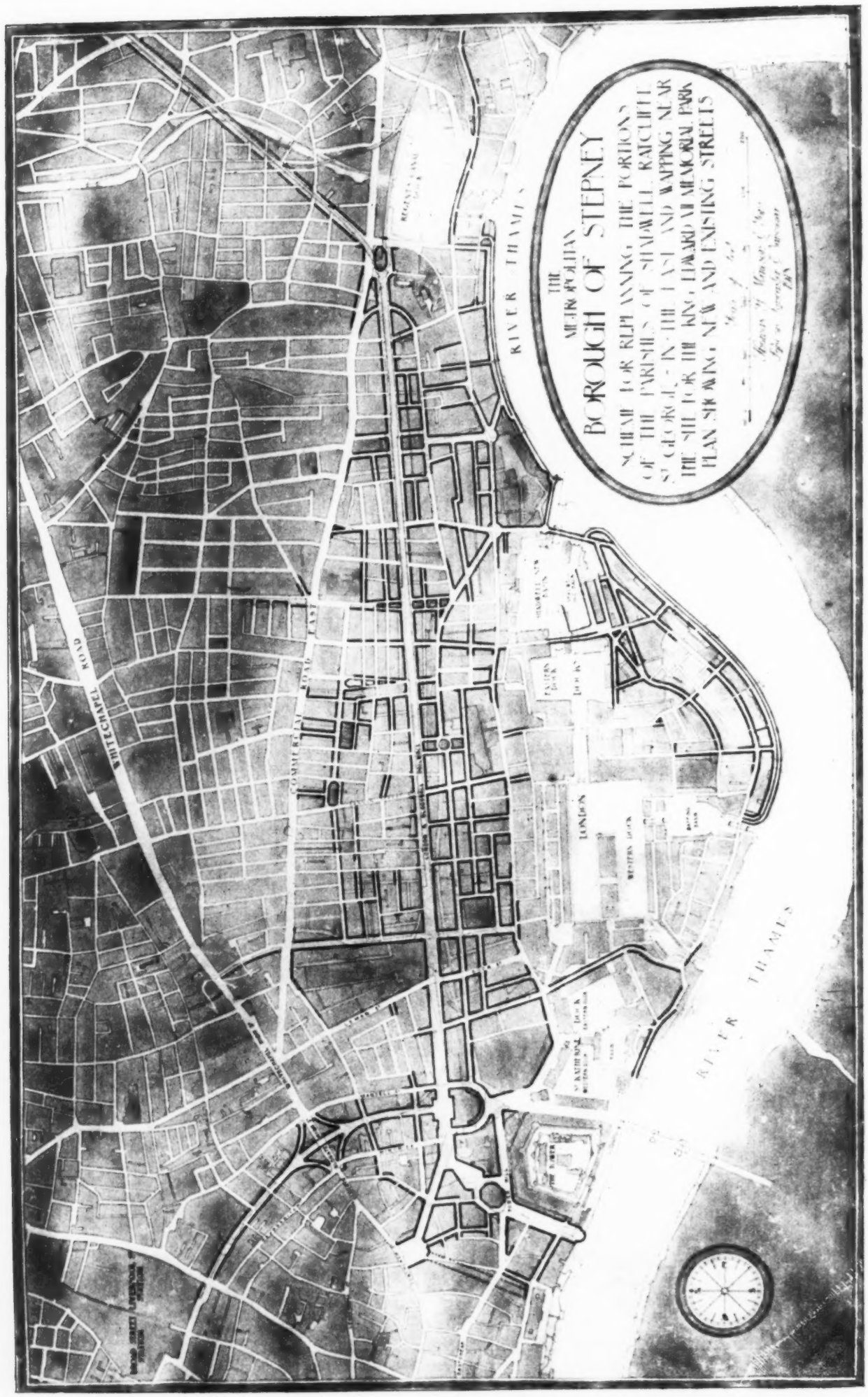
"The offspring of Prussia's Frederick could not crush the children of Milton, Newton and Wren. Science had its votaries at Ruhleben, studies were instituted, the arts practised, poetry written, trades set up, all the activities of a community had their counterpart there. The sick were cared for, the poor relieved, the theatre and music flourished." In the rooms of Central Hall we can now trace this extraordinary achievement.

On the walls as we enter we see among Mr. Jungman's excellent portraits in the Camp that of Captain Powell, its orgainsing brain, to whom be all honour. F. Wade's humorous colour sketches, which would do credit to any London weekly ("The Cook House" and "Christmas Card" are good examples), bear above them the shield designed for the Camp—a sausage, a pair of clogs, a ration of Ruhleben bread, and a Billiken, in their respective quarterings—with two rats as supporters and the motto "Dum spiro spero." The Handicrafts Department became soon the most popular in the Camp School, and here we see the result in finished metal work and bookbinding, in wood-carving, in fancy leather, including purses made of the skins of rats who infested the camp, but were vigorously kept under. And while we watch these the Ruhleben band is discoursing very good music to us; and there comes to us the thought that this is more than an exhibition—it is the spirit of Man triumphant over circumstance.

To come out of the cold, grey dampness of a London January into the rooms of the Fine Art Society, hung with Tom Mostyn's visions of colour, almost takes our breath away. The gladness of these Gardens of Romance is infectious; they are an antidote to depression, and it cannot live in their company. It is as if the artist—and we seem to feel this in his titles, "The Vale of Peace," "Peace," "Sanctuary"—had said: "I will give you the world the heart longs for—the dream that it cannot attain." Looked at more critically, they repeat the tendency which we have already noted of the artist in these columns, to a stereotyped spacing—a line of terrace, a line of trees, of water below, or sky above. These horizontal lines dominate half the pictures here shown—Nos. 5, 8, 14, 16, 22, 29, 33, 36, 37—they are so wonderfully treated that they are not monotonous, but might easily become so.



OVERMANTLE, SIR JOHN LISTER'S HOUSE, HULL.



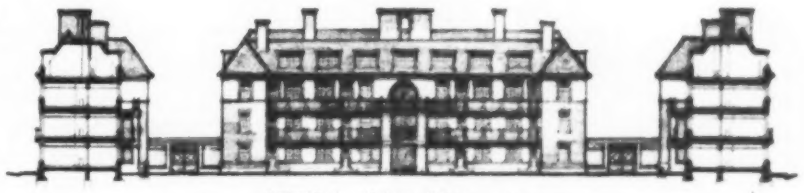
TOWN PLANNING SCHEME FOR THE BOROUGH OF STEPNEY.—BY MESSRS. T. H. MAWSON & SONS.

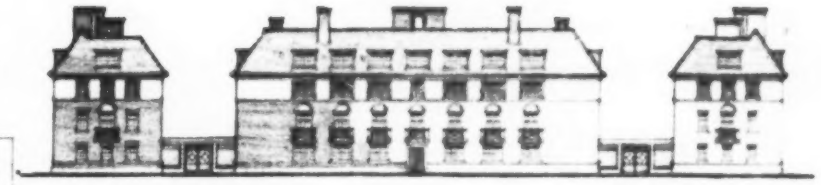
METROPOLITAN BOROUGH OF
STEPNEY

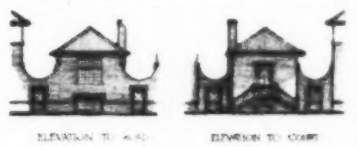
1
WORKMEN'S HOMES WITH WORKROOMS IN ROOF

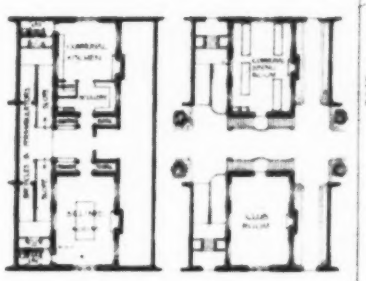
2
WORKMEN'S HOMES WITH DETACHED COTTAGES & ALTERNATIVE PLAN SHOWING COMMUNAL KITCHENS, DINING ROOM & CLUB ROOM

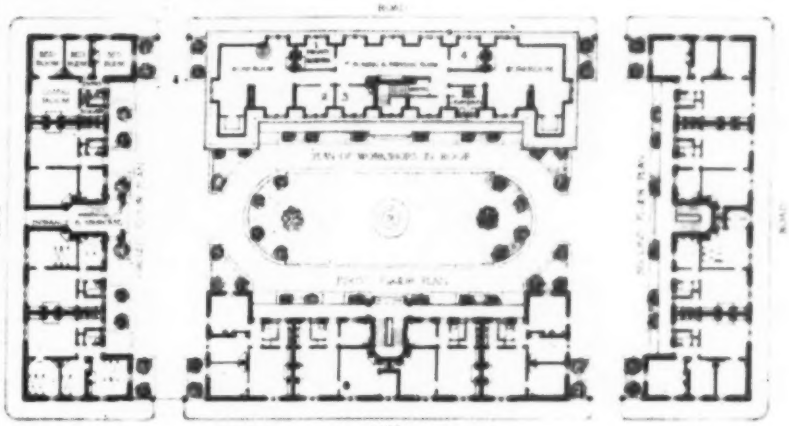
Scale of Feet











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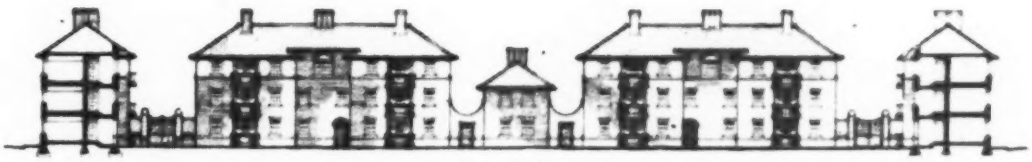

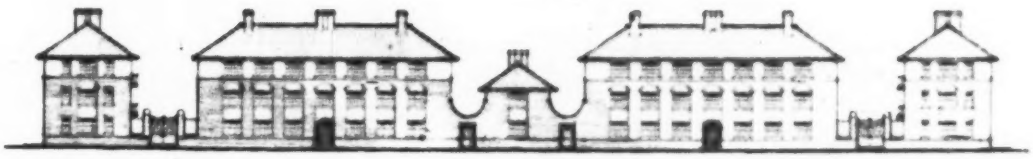

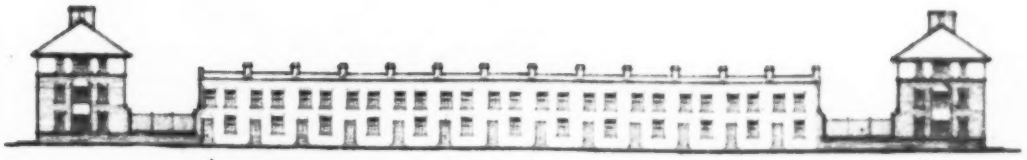

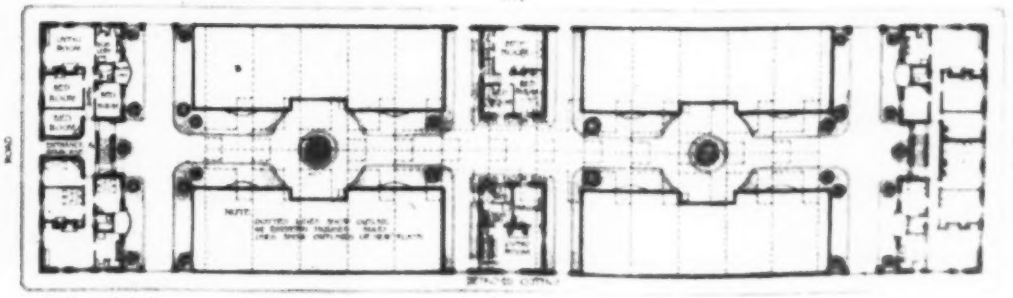

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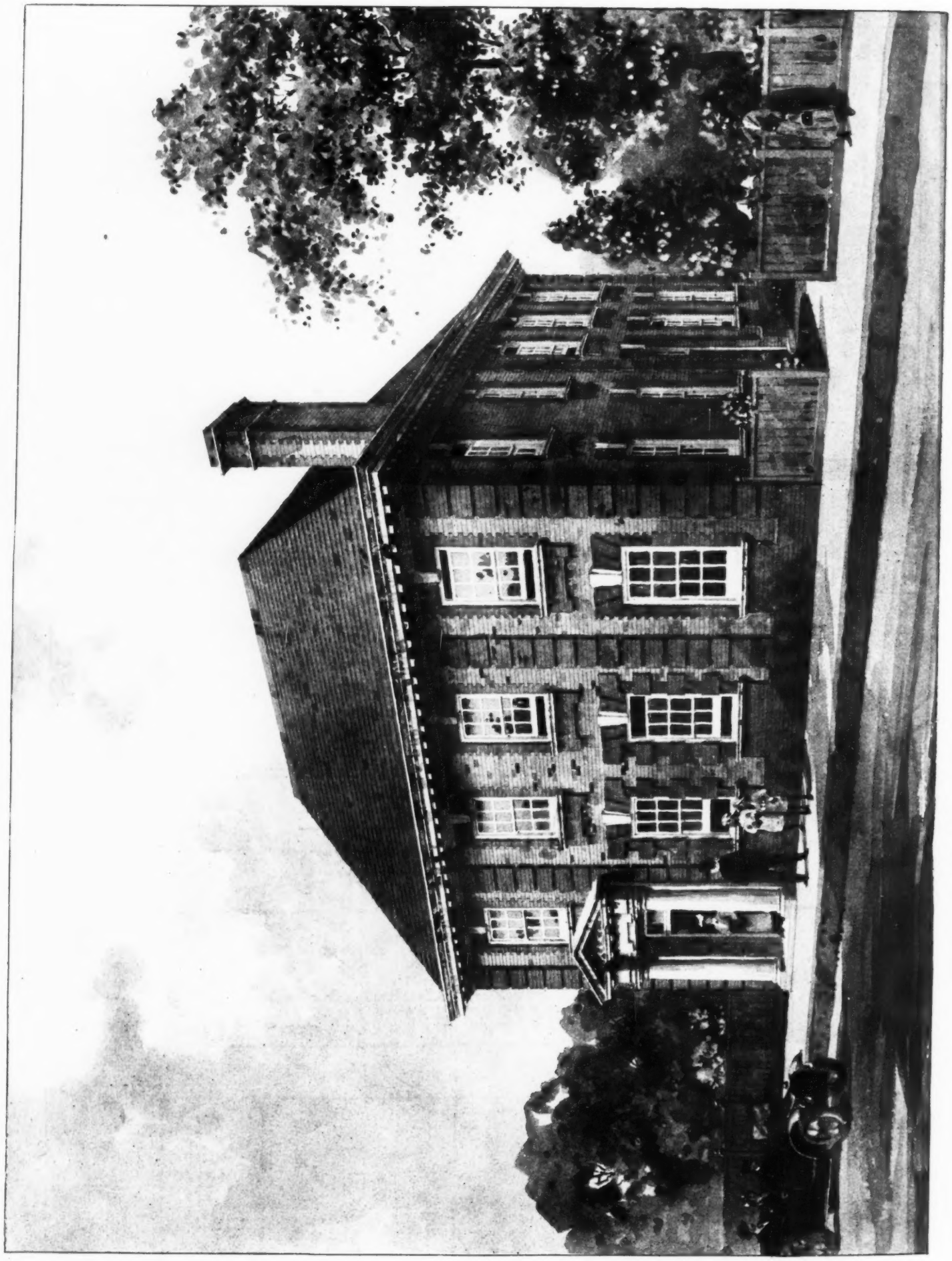
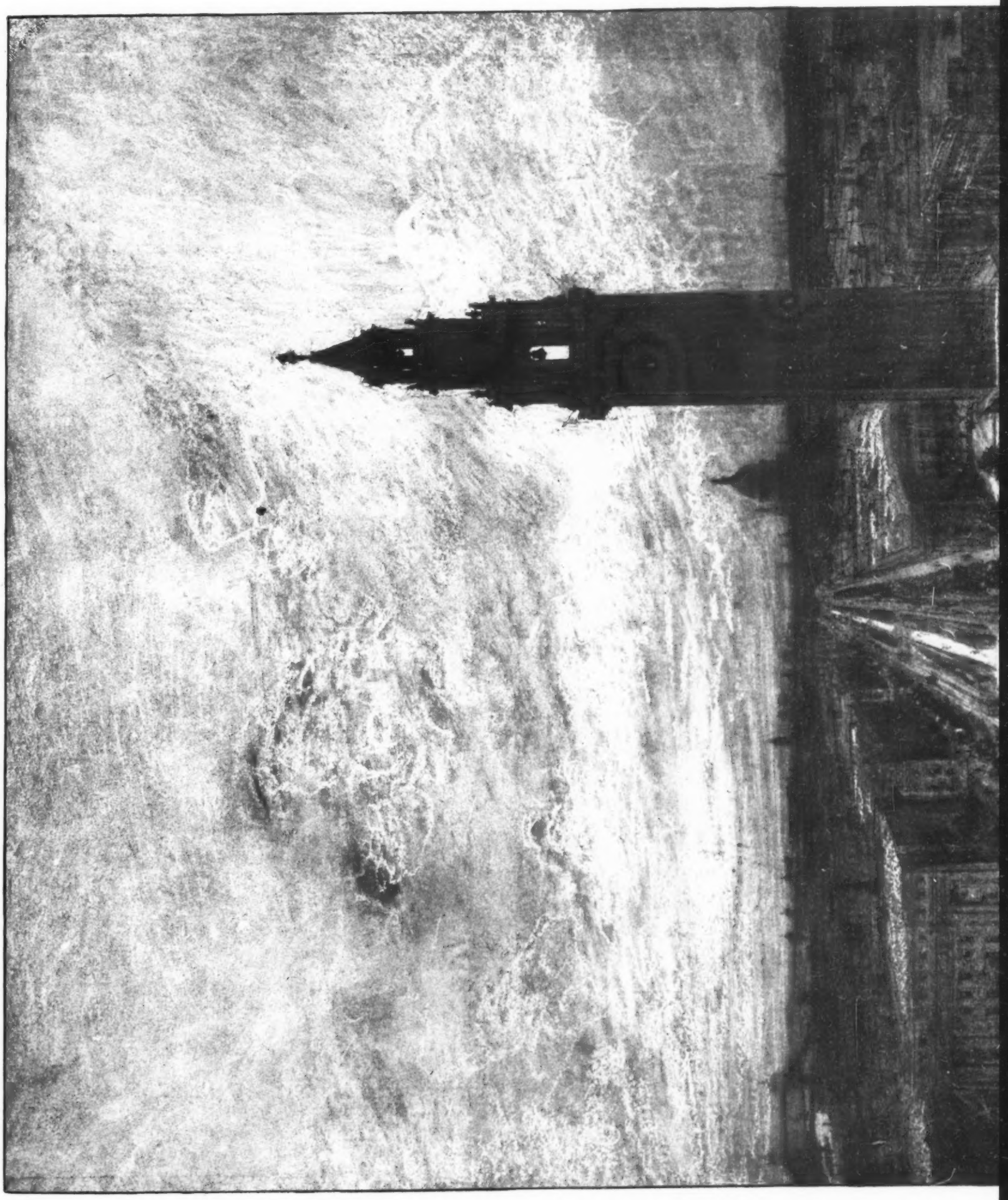
September 20th 1918

Messrs T. H. Mawson & Sons
Landscape Architects

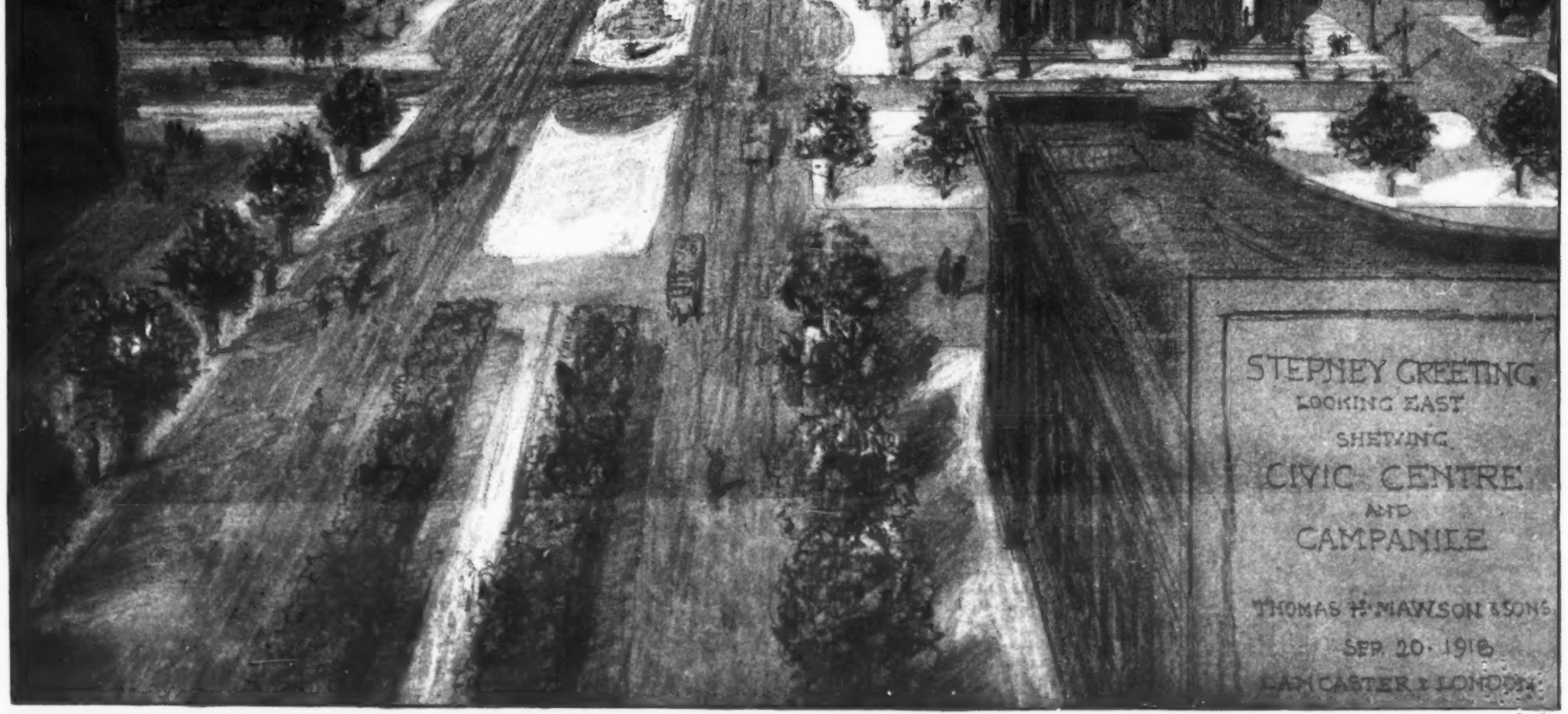
TOWN PLANNING SCHEME FOR THE BOROUGH OF STEPNEY.—BY MESSRS. T. H. MAWSON & SONS.



OFFICES FOR THE SOUTH-WEST SUBURBAN WATER COMPANY, EGHAM.—MR. W. RALPH LOW, ARCHITECT.



CHURCH OF ST. JOHN THE BAPTIST, EGHAM.—MR. W. RALPH LOW, ARCHITECT.



TOWN PLANNING SCHEME FOR THE BOROUGH OF STEPNEY.—By Messrs. T. H. Mawson & Sons.

RECONSTRUCTION IN THE ARCHITECTURAL PROFESSION—III.

DEPARTMENTAL ARCHITECTURE.—I.

By HERBERT H. WIGGLESWORTH, F.R.I.B.A., and H. M. FLETCHER, F.R.I.B.A., President of the Architectural Association.

THE nation deserves the best architecture. We need waste no words in arguing over the proposition; everybody grants it. But how to get it? That is a very different matter, well worth serious thought and examination. Indeed, when we are talking of national reconstruction in terms of architecture, there is perhaps no single question more vitally important to every architect and every citizen of imagination and public spirit.

From every side the cry is "organise!" Four years of war have revealed to the world the marvels of organisation, and now the presumption is, unless proof can be shown to the contrary, that organisation is capable of meeting every demand that can be made upon it. It follows that our national architecture, in the sense of our public and State buildings, and of such national undertakings as the present housing schemes, should be organised; and this, to the mind of the plain man, immediately suggests that it should be carried out by a State Department. The manifold failures of competition in the past have brought about an enthusiasm for co-operation, and there is something fascinating, something finely democratic, in the idea of a hive of industry turning all its energies to so worthy an end as the creation of noble buildings. The transport of armies can be carried out by State organisation, and is impossible without it; the equipment of millions of men with clothing, arms and ammunition, the equitable feeding of whole peoples on scanty supplies, the control of their correspondence and means of conveying information are in like case. By the adoption of standard methods of procedure under State control friction is minimised, waste and overlapping nearly eliminated, the wheels are oiled, and the whole vast machine moves towards its objective with the precision of a locomotive or a battleship. A system that is capable of such extraordinary feats as these will similarly provide the nation with the buildings it requires for national purposes.

Will it?

The plain man thinks it will, because in his plainness he sees no difference between official architecture and official clothing, rationing or censorship. The official thinks it will for many reasons, among which force of training and the bent of mind that led him to an official career are the strongest. And as, between them—the plain man by strength of numbers and the official by strength of position—they can put most things through when they pull the same way, there is every prospect that a system of official architecture will soon prevail all over this country, unless other forces are stronger. And by "official" architecture we mean not officially controlled, but officially designed, architecture, State buildings designed by a State department to meet national needs, municipal buildings designed by a municipal department to meet civic needs. The tide has long been flowing in this direction, and its strength is rapidly increasing.

Now, if this system will give the country the best architecture, there is no more to be said, and every decent architect must back it with all his might. It is for us to give the country the best service that is in us, and the whole matter should be considered from this aspect alone; all other aspects are subsidiary and can be adjusted, should the need arise. This alone is vital, that the nation should have the best architecture; and if departmental architecture is the best, we must roll up in our thousands, the more brilliant to enter the Office of Works, where the great national buildings will be made, the less gifted of us to the borough surveyor's department in the most progressive town we can come across. What finer object can there be, what more calculated to swamp all self-seeking, all professional jealousies and prejudices in a flood of co-operative enthusiasm for the country and for architecture?

But how if the answer be not in this sense at all? The question, at any rate, demands more careful examination, and it may have occurred, not perhaps to the plain man, but to those who have thought with deeper knowledge, that the triumphs of organisation which we have admired have been purely administrative and have not touched creative work at all, and that when organisation triumphs in a wrong direction, the very completeness of its achievement results in failure more disastrous than the failure of disorganisation. So before taking the plunge, it behoves us to see very clearly the course of the current we are plunging into.

The difficulty in treating of architecture in this connection arises from its complexity. On the material side, and in so far as it is concerned with the erection of buildings, there is much about it that is merely administrative, and may be fittingly subject to the organisation we are discussing. But on its immaterial side, and in so far as it is concerned with the design of buildings, it is dependent on creative imagination; the best architecture, such as we desire for the country, is unattainable without the exercise of such imagination. And this brings us full tilt into the question: What is departmental imagination?

What indeed? Who ever heard of the Tragedy Department, the Office of Epics, or the Board of String Quartets? The names are enough; *solvuntur risu*. The plain common sense of the matter is this: no department can have imagination; the best buildings cannot be designed without imagination; the country ought to have the best buildings; therefore, no department should be allowed to design buildings for the country.

This applies primarily to the Office of Works, or any other great Government department that keeps an architectural staff for the creation of national buildings; but it is no less true, though the results are on a smaller scale, of county councils, borough councils and all the other bodies among whom this essentially sterilising system is spreading. "Essentially," because it is of the very essence of a department to lack the *élan*, the adaptability, the resourcefulness implied in the word "imagination." Its size constrains it to work by rule and regulation, lest it fall into confusion. And though it may be claimed that the work of the war organisations referred to above showed the existence of imagination in the directing brains, such imagination is of the nature of exceptionally shrewd foresight rather than of creative power. Moreover, it must be remembered that the work accomplished was done under the strongest stimuli of patriotism and apprehension as to the result of failure, and it is impossible to expect that in the routine work of peace time men and women will continue to show the keenness and self-sacrifice that were evoked under such conditions. The tearing up and scattering from the windows on Armistice Day of thousands of departmental papers showed pretty significantly what they thought of the drudgery.

Similarly with departments of design, it is possible now and again to point to something that looks like freshness of idea, when, as sometimes happens, an architect of imagination becomes responsible for a given piece of work; but it is not possible for such inspiration to be sustained. Either the architect, being a man of imagination and therefore keen for liberty and adventure and experiment, will leave the organisation, in which case so much of his inspiration as remains behind will speedily become second and third hand, or, in other words, tired; or he will stay where he is, and the organisation will choke the inspiration, so that he becomes either an official designer or an organiser. And an organiser and an architect are different things; you cannot have it both ways.

It should be clearly understood that we are not arguing against the existence of these departments, but merely against their misapplication. Official control of architecture is not only unavoidable but often necessary, and, when sympathetically and reasonably exercised, may be beneficial. In the case of large schemes it has a great function to perform in co-ordinating parts so as to produce the harmony that is still compatible with the variety and flexibility of life; it may suggest and criticise, help to raise the standard and veto whatever falls below the standard. But official creation of architecture is a contradiction in terms; such harmony as it produces is at the expense of variety, a concord with no contrasting discords, no living harmony, but a dead monotony. The causes of this are various, but a principal one, to which we propose to return next week, is the absence of contact with the client.

National Gallery.

A selection of pictures of the Italian School of the fifteenth century was opened to the public on the 23rd inst.

FUEL ECONOMY IN PRIVATE HOUSEHOLDS.*

By A. H. BARKER, B.A., B.Sc., Wh.Sc.
Lecturer in Heating and Ventilating Engineering, University College.

To Minimise Heat Losses.

LET us now consider in a practical as distinct from a theoretical sense, what a householder can do in order to secure the maximum of economy from the plant which he already has. We must approach the matter from two standpoints, namely (1) the standpoint of the heat lost; (2) that of the heat supplied; and consider in each case what practical steps the householder can take to minimise his losses.

Consider (1) the heat lost. The amount of this depends to a great extent on the construction of the building, and the householder can only influence it or modify it to a comparatively small extent. It has been shown that the heat lost arises from the heat conducted through the walls and windows; (2) the interchange of air between the inside and the outside.

The only way by which that loss can be reduced is (1) by reducing so far as possible loss through the walls and windows, and (2) by preventing excessive ventilation. The householder can, unfortunately, do very little without great expense to modify the amount of heat loss through the walls. The only possible method to reduce this loss generally would be to protect the walls and the windows by such methods as matchboarding the walls, or double glazing the windows, or protecting them in some other way by curtains or otherwise. We have recently published the results of some very careful experiments made in our laboratory, which show that by matchboarding the walls the loss is reduced by some 40 per cent.

The effect of curtains, even very thin curtains, on the heat loss from a window is very considerable. To draw a pair of heavy curtains over a large window is often sufficient to raise the temperature of the room several degrees, but as a practical proposition it is evidently impossible to modify this loss to any considerable extent without great expense. To double glaze the windows halves the loss of heat from a window.

Avoid Excessive Ventilation.

The only practical way of making a room warm without incurring expense is to reduce the ventilation, that is, by stopping up as far as may be the apertures through which the excessive ventilation finds its way into and out of the room. I am not advocating the entire suppression of, or even an undue reduction of, ventilation. I would like, however, to point out that any room provided with an open fire and a chimney flue has probably an amount of ventilation far in excess of the requirements of any probable occupants of the room, even though all the doors and windows are closed.

In several tests made by me on this point the result has been an interchange of from five to ten complete interchanges of the room air per hour, depending on the height and size of the flue and other matters. A room of 2,000 cubic ft. commonly has not more than one or two occupants. A chimney flue not infrequently draws through the room 20,000 cubic ft. per hour. Even if it has five occupants the amount of ventilation introduced by an open fire and an ordinary-sized flue, say, 9 in. by 9 in., would be perhaps 4,000 or 5,000 cubic ft. per head per hour. An amount which is recognised as extremely liberal, even for a hospital.

This liberal ventilation is, of course, all to the good from the hygienic point of view, but it must not be lost sight of that such excessive ventilation combined with adequate warming of a room necessarily involves an immense expenditure of heating energy. We have been trained in the past ten years to regard the open windows as the be-all and end-all of hygiene in matters of room ventilation. I am not going to say anything against the open window, except that in cold weather it is a wasteful and extravagant practice to have too much of the open-window régime; or, rather, that persons who desire to have the windows open must be prepared to endure either a considerable degree of cold or a very extravagant consumption of fuel. The first may be good for them. I am not going to say whether it is good for them or not. Personally, I am inclined to think that it is good for a person to live in a room as cold as he can endure it without acute discomfort, but do not make any mistake about its extravagance from the heat point of view.

The easiest method of restricting the amount of air passing through a room is to check the chimney draught by means of a register or damper in the flue, or by building up fireclay slabs over part of the opening. Whether this is practicable or not without causing the fire to smoke depends on the constructions and conditions of the flue. The slab must be made, of course, so that it may be removed when chimney-sweeping operations are required. But the building up of a slab over a considerable portion of the opening, leaving perhaps a matter of 8 or 10 square in. of opening is certainly a valuable means of increasing the feeling of warmth of the room as distinct from the effective heat.

Reduction of Fuel Consumption.

The next method of securing economy is to reduce the fuel consumption and to secure as much radiation from the fire as possible and to prevent the heat from being wasted.

We have carefully to distinguish between two aspects of fuel economy. The first general principle for increasing the economy of fuel is to refrain from burning too much. The other principle is to secure the maximum result from the amount that is burnt. These two principles should never be confused.

It is easy enough to reduce the total consumption by reducing the rate of combustion or by building up the part of the grate as recommended by the Coal Controller; but it is absurd to close one's eyes, as he does, to the fact that in reducing the consumption, the amount of heat given off by the fire is proportionately reduced. We may burn the coals slowly or fast, the total heat delivered into the room is exactly proportionate to the amount of fuel that is burnt.

It makes very little difference to the total output of heat whether the fuel is stoked at frequent intervals or put on the fire in one bulk. The total amount of radiant energy delivered into the room will be approximately the same. But, although this is true, it is necessary carefully to remember that when the greater part of the coal is burnt in one big burst; that is, when the fire is allowed to blaze up fiercely for about ten minutes or a quarter-of-an-hour after the coal has been stoked on the fire, a large part of this radiant heat is immediately lost by radiation to the walls and windows, as has already been explained in previous articles, and that, subsequently, the rate of combustion corresponds only to a relatively small delivery of radiant heat.

By far the most effective method of burning a fire is to keep it approximately at the same low level by feeding on the coal frequently in small quantities at a time.

It has been explained that the effect aimed at in radiant heating is that of direct heating. The object is not primarily to make the whole of the contents of the room warm, but to produce instantaneously and immediately conditions which are tolerable for a person occupying the room, even although the air, the furniture and other things in the room, are cold. It takes many hours for a system of heating thoroughly to warm up the cold air and furniture of a room. With any method of rapidly introducing radiant heat into a room—such, for instance, as a gas-fire or electric fire, which can attain their maximum heat in a few minutes, the conditions in a perfectly cold room can be rendered tolerable within that space of time. With a coal fire it has been shown the time is much longer, say, an hour.

Now, if with a coal fire we waste the majority of our fuel in a great burst of splendour, which will last, say, only a quarter-of-an-hour, we have not got the fuel left to maintain these radiant conditions continuously, and that is the principal object of a fire. It is true that if the fire is kept burning for a long period, the thermometer gradually rises, corresponding to the rise in temperature of every other object in the room; but the principal aim in radiant heating is an instantaneous effect continuously produced. Air heat is not an instantaneous effect, but a gradually increasing effect. I have already explained that when a room is warmed by a radiant object, the cold is felt immediately on its removal. On the other hand, if the room is heated by air, and the source of air heat is removed which produces the same feeling of warmth as the fire, the effect of the heat will not be lost for a long time. I have explained in a previous article the reason for this.

(To be concluded in our next issue.)

(Continued from page 57.)

The "Accademia Etrusca" of Cortona.

Count Plunkett, M.P., Hon.A.R.I.B.A., has been elected an honorary Academician of the "Accademia Etrusca" of Cortona.

THE SOCIETY OF ARCHITECTS.

TOWN HOUSING OF THE WORKING CLASSES.

At a meeting of this Society, on the 16th inst., Major Herbert Freyberg, F.S.I., member of Council, and Past Chairman of the Public Health Committee, and of the Housing Sub-Committee of the Kensington Borough Council, gave an account of an experience of the administration of Part III of the Act of 1890.

His remarks had reference to the condition of five streets known as the special area, having a population of about 4,000 of the very poor, with an average death-rate for the years 1896–1900 of 49.5 per cent., and other unfavourable features. One of the five streets, he said, was considered the most desirable, as on the north side there was a row of twenty-eight non-basement, two-storied cottages, with long gardens abutting on a small public park, which offered scope for improvement, while on the south side there was a row of cottages with underground rooms, and entire absence of through ventilation, which seemed to call for early and entire demolition. Owing to the absurdity of our system of land tenure it was only after two years' silent work that the Council were able to purchase for £12,000 the greater portion of the freehold, leasehold, and other interests in this particular street, and the Committee were authorised to round off the estate by purchasing outstanding interests.

Having "bought the street," the cheapest and simplest plan would have been to empty all the houses in order to start on reconstruction and remodelling in one simultaneous, complete and comprehensive scheme, but it was felt that to make many hundreds of people homeless would be a very bad start for a housing scheme of this sort, where the intention was to rehouse the existing population with the very minimum of disturbance. As six of the houses on the north side were purchased with vacant possession, each of these four-roomed cottages was transformed into two self-contained three-room suites with separate w.c., scullery, larder, and either well-paved yard or deep balcony overlooking the small park. The works comprised the erection of kitchen, scullery and w.c., balcony, larder, &c., to each suite, entirely new sanitation of L.C.C. standard, new roofs, practically new plastering, new stairs and floors, paved yards, concrete over site, damp courses, &c., &c., costing about £1,900 all told, which includes twelve new rooms, this if taken at £80 per room leaves about £40 per room for remodelling; these twelve three-room suites let at once at 7s. 6d. per week each. Eleven adjoining houses were then emptied and remodelled at an expenditure of about £4,300, and formed into nineteen three-room suites, and three two-room suites with office and workshop, which let at 8s. and 6s. 6d. per week respectively. Nine other cottages were converted at a cost of about £3,200 into eighteen two-room suites which let at 6s. 6d. a week. The remaining two cottages on the north side being ruinous were demolished and a new three-story building put up containing six two-room suites at a total cost of £1,552, or nearly £130 per room. These suites let at 7s. per week each. The south side presented a more complicated problem, owing to the lack of depth and the restriction of the building line, but, after negotiations with the L.C.C., six new blocks of self-contained two-room suites were erected at a cost of about £8,400, which worked out at nearly £120 per room, and each suite let at about 6s. 6d. a week.

At a closely adjacent site, five dilapidated dwellings were demolished, and twenty-six single room tenements erected at an outlay of about £2,400, or, say, £90 per room, which let at 3s. 6d. and 4s. per week per suite. It will be seen that while remodelling cost from £40 to £50 per room rebuilding cost twice and nearly three times as much and the new buildings were nothing like as popular as the rooms in the more homelike cottages. Another experience gained was the very much greater demand for the three as compared with the two-room suites.

It will be obvious that if the works had been carried out at one and the same time at least 10 per cent, or 15 per cent. would have been saved, but such a course was not deemed desirable.

The capital outlay worked out as under:—

Purchase of freehold interests		£9,801
,, leasehold ,,		12,575
,, trade ,,		125
,, underleases		535
		23,036
Costs on purchasing		1,500
Remodelling contracts and extras		8,158
Supplementary works		1,500
Rebuilding contracts and extras		12,325
		£46,519

The income and outgoings were roughly as under:—

Total rents	£2,059
Outgoings	984
	£1,075
Add freehold ground rent with reversion 1929	19
Net annual income	£1,094

The loan charges were as under:—

ANNUAL INSTALMENTS ON PRINCIPAL.

£28,473 for 60 years	£475	
15,133 ,, 50 ,,	303	£778 0 0
Interest for 1906:—		
£11,500 × 3½	£402 10 0	
32,130 ,, 3¾	1,204 17 6	1,607 7 6
		2,385 7 6
Less net income		1,154 0 0
Annual charge on rates		£1,231 7 6
Annual charge on rates decreasing each year by £28 13s. 10d.		

This annual deficit, equal to half a farthing in the £, was very much more than saved over the Poor Rate.

In addition to the foregoing, three other improvements were effected—anticipating the Town Planning Act:—

I. About ⅛th of an acre was added to the park.

II. Some 2,400 ft. was thrown into the street.

III. About 2,000 ft. extra air space was made available free from buildings.

No credit was taken for these improvements. Every item of expenditure was entered. All temptations to write down to site value were resisted. About one-fourth of the original occupants availed themselves of the new accommodation. About half came in from other parts of the borough, the remainder were people who came in because of their work being handy.

The evil of having two-room suites—which was forced on the Committee by certain members of the Council—was seen at once, directly the children of the applicant were over 12 and of opposite sexes, as of course they had to be refused unless a three-room suite was available. With four out of the five streets left severely alone, it could not be expected that the scheme as only partially carried out could be an unqualified success.

In placing these details before you, I want to impress upon you the fact that long before housing was boomed there were citizens patiently plodding at this work, overcoming obstacles and oblivious of all save the object in view. At the risk of repetition, I would emphasise the idea that all housing schemes in London should embrace the twofold object of slum demolition in conjunction with the erection of healthy homes. Another point to remember is that there are hundreds of fairly wide streets in London bordered by two-storied non-basement cottages easily adaptable into two *three-room self-contained suites*. Do not let us replace this with buildings whose height shuts out the sunlight and the air, and whose stairs are so trying to the strength of the worker and the legs of the children.

Just before the war broke out there was a Departmental Committee of the Local Government Board sitting to take evidence as to building by-laws, and I spent a very interesting morning with them, as one of the representatives of the Surveyors' Institution; you have no doubt seen their report.

My experience teaches me that if national housing is to be a success, and unless it is I fail to see how the country can flourish, we want certain reforms, and we want them at once.

(1) An inexpensive, easy and simple method for the transfer of land, with simplicity of tenure and free from restriction.

(2) Amendment and codification of building by-laws, with the repeal of all hampering sections.

(3) Freer license as to use of materials.

(4) Standardisation of fittings, with encouragement of their manufacture as a village industry.

(5) Increased facilities for production and reduction of cost in distribution.

(6) All regulations and by-laws to be administered on business principles, and with civility and intelligence.

(7) Where security is good, and the scheme is an improvement, the capital to be available with repayments spread over a considerable term; building societies, if backed by the State, already provide the machinery for this.

I emphasise this last, as in my opinion people of all classes should be encouraged to own the house they live in, and there should be only one tenure, viz., fee simple with an annual contribution to the State. Leasehold enfranchisement is a necessary preliminary. . . . .

[Some notes of the discussion which followed will be given in our next issue.]

MAJOR PRESCOTT, M.P.

MAJOR W. H. PRESCOTT, who was elected to the House of Commons at the recent General Election as the representative of North Tottenham, has been the chief engineer of Tottenham for twenty years. He is a member of the

Institution of Civil Engineers, the Institution of Mechanical Engineers, a Member of the Council Institution of Municipal and County Engineers, a Barrister-at-Law (Gray's Inn), and a Governor of the Prince of Wales's Hospital, Tottenham. At the outbreak of war he acted as Hon. Organiser for the raising of the Tottenham Division of Royal Engineers, and went overseas in command of the 222nd Field Co. (Tottenham), R.E., being invalided home at the end of 1915. He is a member of a Lancashire family prominent in the Municipal world, his late brother, Mr. R. M. Prescott, being the Solicitor and Town Clerk of Sheffield, whilst another brother is Colonel A. E. Prescott, D.S.O., R.E., the present Borough Engineer and Surveyor of Eastbourne. Now that he has been elected to the House of Commons Major Prescott proposes to resign his public appointment and practise his profession at the Bar.

HOUSING AND TOWN PLANNING COMPETITION, BOLTON.

THE following are the conditions of the Cottage Competition for the Corporation of Bolton :—

The Housing and Town Planning Committee of the Corporation invite designs for cottages in accordance with the instructions and particulars stated below. The designs are to include the following types of cottages (minimum heights of rooms, 8 ft.), viz. :—

Type No. 1.—Living room, scullery, larder, coals and w.c., 3 bedrooms and bathroom. (*a*) In pairs (*b*) In blocks.

Type No. 2.—As Type 1, with parlour in addition. (*a*) In pairs. (*b*) In blocks.

Type No. 3.—As Type 2, with additional bedroom. (*a*) In pairs. (*b*) In blocks.

Desirable Minimum Areas of Rooms.

TYPE NO. 1.

	Floor Area, Sq. Ft.
Living Room	180
Scullery	80
Larder	15
No. 1 Bedroom	150
No. 2 Bedroom	100
No. 3 Bedroom	65

TYPES NOS. 2 AND 3.

Parlour	120
Living Room	180
Scullery	80
Larder	15
No. 1 Bedroom	160
No. 2 Bedroom	120
No. 3 Bedroom	110
No. 4 Bedroom	60

Suggestions for Planning.

Staircases in all cases to be not less than 2 ft. 10 ins. wide, and along with all rooms to have direct light and ventilation. Two bedrooms at least to have fireplaces, with special ventilation to other bedrooms. In the case of living and bedrooms it is advisable windows should come within 1 ft. of the ceiling. Window area to be at least equal to 1–10th the floor area of each room, with half of this area to open. Separate system of drainage will be required for soil and top-water conveyance.

Short descriptive report, together with areas and cubical contents, also approximate costs per house for the various types. Competitors to suggest any method for economical construction.

All houses are to be provided with a bathroom and fixed bath with lavatory basin (if possible), together with necessary hot and cold water appliances. Wherever possible, materials of the locality, if reasonably obtainable, should be specified, but as there exists at the present time a serious shortage of certain materials, competitors are invited to suggest the substitution of others with a view of facilitating and cheapening construction. Notes of materials, &c., are to be printed on the drawings, together with the cubic contents of each house, measured from 1 ft. below the floor to half-way up the roof. No separate report is necessary. The depth of the site is left to the discretion of the competitors, and the site may be regarded as level. Each design is to show plans of each floor, one section indicating the staircase, and two elevations, and to be drawn to a scale of 1–8th of an inch to the foot on half double-elephant sheets. No other drawings to be submitted.

Premiums.

Type No. 1.—(*a*) 1st, £15; 2nd, £10. (*b*) 1st, £20; 2nd, £10.

Type No. 2.—(*a*) 1st, £20; 2nd, £10. (*b*) 1st, £25; 2nd, £15.

Type No. 3.—(*a*) 1st, £20; 2nd, £10. (*b*) 1st, £25; 2nd, £15.

It is to be understood by competitors that the payment of the premiums conveys the absolute possession of the designs, including all copyright or other rights, and that the promoters will be at liberty to make any use whatever of the designs, and to publish them with the names and addresses of the authors. The promoters reserve the right to exhibit publicly after the award, all or any of the designs as they may think best, with the names of the authors attached. No restrictions will be placed upon the number of designs submitted in each class by competitors. The assessors in each competition will have the option of recommending designs of special merit for further premiums (or honourable mention) in addition to those stated in the conditions. Designs are to be prepared in accordance with instructions, and any design which does not so conform will be excluded; on this point the assessors are to be the sole judges. The plans may be prepared without regard to existing By-Laws or Local Act Provisions, the object being to show the best types possible if existing restrictions are removed.

All drawings are to be drawn with the long dimension of the paper vertical, and each class is to be clearly marked Type 1*a* or 1*b*, Type 2*a* or 2*b*, Type 3*a* or 3*b*. Each class is to be shown on a separate sheet and the classes may not be intermixed. All drawings are to be in line only, without washes, with the walls blacked in, and are to be sent flat. The drawings are not to be mounted on strainers, and are to be in black ink, with a black wash over the window openings. No perspectives are to be sent. Every care will be taken of the drawings, but the promoters will not be responsible for any damage they may sustain, or for their loss. The fact of a design being premiated will not prevent the author from making use of it in his practice if he so desires. The assessors will be appointed by the Housing and Town Planning Committee of the Bolton Corporation. . . .

The designs are to be delivered on or before February 14th.

In the case of blocks of cottages access from the back to each plot is to be assumed.

Designs are only required for cottages without having any regard whatever to the depth of plot, and in the suggestions for planning, "the depth of the site is left to the discretion of the competitors, and the site may be regarded as level."

THE SURVEYORS' INSTITUTION.

The Interim Forestry Authority.

A Conference was held at the Surveyors' Institution on December 8, when a number of subjects connected with the future policy of the Government with regard to forestry were discussed. The Interim Forestry Authority were represented by the Rt. Hon. F. D. Acland, M.P., Chairman, Lord Clinton, Col. Fotheringham, Mr. I. Ponsonby and Mr. Robinson; the Surveyors' Institution by the President, Mr. J. H. Oakley, the Secretary, and a number of members representing the Forestry Committee and holders of the Special Forestry Diploma of the Institution. The Land Agents' Society was represented by the Chairman, Col. E. A. Earle, F.S.I., the Secretary, Mr. G. Lipscomb, and a number of other members. Discussion concentrated largely on the replanting of felled areas and how best the co-operation of landowners could be secured to extend the area of suitable land under timber.

Training Advisory Boards.

The Council of the Institution, at the request of the Controller-General (Appointments) of Civil Demobilization and Resettlement, have consented to the Secretary, Mr. A. Goddard, C.B.E., joining the Advisory Board at General Headquarters, France, which has been set up for the purpose of advising officers as to the civil career they should most profitably adopt and the course of training they should pursue. Mr. Goddard will be absent in France for a month, at the end of which time it is possible that his place may be taken by the President of the Institution, Mr. J. H. Oakley.

LAW REPORTS.

KING'S BENCH DIVISIONAL COURT.
(Before MR. JUSTICE DARLING, MR. JUSTICE AVORY, and MR. JUSTICE SALTER.)

The War and the Restrictions on Building.

The Director of Public Prosecutions *v.* Solomon Ford.

IN this case the Crown appealed from the dismissal by the Hampshire Justices of an information which charged the respondents under Regulation 8E of the Defence of the Realm Regulations with having, between February 15, 1917, and July 31st, 1917, unlawfully, without licence from the Minister of Munitions, carried on certain building and construction work on premises known as Doiley Manor, Hurstbourne, Tarrant.

It appeared that on August 21, 1916, the Ministry of Munitions issued to Mr. Ford, the respondent, a licence for the erection of a dwelling house on a farm, at an approximate cost of £500, and between August 21, 1916, and February 15, 1917, the respondent exceeded the terms of the licence by causing work to be carried out at Doiley Manor, at a cost of about £1,000. Between February 15 and July 31, 1917, the respondent caused building and construction work to be carried on at Doiley Manor, at a cost of £364 9s.

The respondent contended, firstly, that Regulation 8E and the Order made thereunder were *ultra vires*; and secondly, that the cost of all work carried on by him before February 15, 1917 must be ignored, and that, as since that date, he was not proved to have spent more than £364 9s. on building work the information should be dismissed.

On behalf of the Crown it was, however, contended that respondent could not avail himself of his second head of defence, because, between August 21, 1916, when the licence was granted, and July 31, 1917, the respondent was proved to have spent £1,364 9s., and that, therefore, the total cost of the whole completed work in contemplation exceeded £500.

The Minister of Munitions, in pursuance of powers conferred on him by Regulation 8E, made an Order that no person should, without a licence from him, "commence or carry on any building or construction work," with a proviso that the licence should not be required "where the total cost of the whole completed work in contemplation does not exceed £500, and the use of constructional steel is not involved."

The Justices dismissed the information, being of opinion that the respondent had not been proved to have spent more than £364 9s. between the material dates. Hence the present appeal.

The Solicitor-General, Mr. Branson, and Mr. Roome appeared in support of the appeal, and Mr. W. H. Upjohn, K.C., Sir E. Marshall-Hall, K.C, and Mr. Van den Berg for the respondent.

At the conclusion of the arguments Mr. Justice Darling, in giving judgment, said that, in his opinion, neither Regulation 8E nor the Order made under it was *ultra vires*. In his view it was necessary to look back beyond February 15, 1917. It was clear that the Justices had assumed that as a licence had been granted to the respondent it was immaterial to consider what he had done before the granting of the licence. He thought the view taken by the Justices was wrong, and the case must be remitted to them with a direction to convict.

The other members of the Court also delivered judgments allowing the appeal.

We understand from Messrs. Roberts Adlard & Co., roofing contractors of 47, Queen Elizabeth-street, Bermondsey, S.E., that they are carrying out the roofing to the Chepstow Housing Scheme, and in order to obtain artistic effects are using several brands of tiles, including Messrs. Tuckers. In connection with the Roe Green Housing Scheme, Farnborough Housing Scheme and part of Gretna, they have also furnished the roofing requirements.

THE INCORPORATED INSTITUTE OF BRITISH DECORATORS.

THE EDUCATION OF THE PAINTER AND DECORATOR.

MR. ARTHUR SEYMOUR JENNINGS, F.I.B.D., read a paper on this subject at the Painters' Hall, recently, before the Incorporated Institute of British Decorators.

He said that following the decay of the apprenticeship system, the education of the young painter was left in a most unsatisfactory state without system or organisation. Until a year or so back, when day classes for painters were started in London, Glasgow, Manchester and a few other larger cities, the only technical education for the trade was the instruction given at evening classes and these, although most useful, were, he claimed, entirely inadequate, because of the limited time available and the fact that lads and young men were often, and perhaps not unnaturally, loath to study after a hard day's work, also for the reason that the study of colour could not be successfully proceeded with by artificial light. The establishment of day classes, such as those at Brixton, and the passing of Mr. Fisher's Act for continuation education—a principle which he had advocated for many years—provided two important steps in the right direction and to a considerable extent changed and improved the situation, although neither went far enough.

The speaker next quoted from an article written by Mr. S. Sherman, B.A., B.Sc., in which he said that the Education Bill was the keynote of real democratic reform, inasmuch as it asserted the just and righteous principle of equal opportunities for all. He also said that the only qualification should be ability.

The lecturer suggested that substantial scholarships or bursaries should be formed so as to encourage the development of special ability. He believed that general and technical education should go hand in hand. The education should be followed at the continuation schools and afterwards, when special ability manifested itself, should lead to matriculation classes and ultimately to a degree of Bachelor of Arts in Decoration. The thought would naturally occur, he said, that only a very small proportion of young men could hope to prove themselves to be so brilliant as to rise to such eminence. What could they hope to achieve with the mass of the boys? Not a great deal unless they were taught in day classes for painters which should be established in every town and city in the United Kingdom. Such classes would do more toward raising the status of the painting and decorating craft than anything else. Of course, where funds existed it would be best for the lads to spend their whole time at the school where they should get a good grounding in their chosen craft and at the same time improve their general education. In other cases the employers should give a certain part of the time off—say three or four mornings or afternoons each week, with full pay. He very strongly advocated the early establishment of painters' and decorators' day classes all over the United Kingdom. At present there were perhaps half a dozen such classes. There ought to be several hundred, one or more in every large town, while smaller places could be dealt with in groups.

By adopting the scheme suggested, the employer would have young men or youths entering their employ who would be very useful from the beginning and this was the foundation of success. Perhaps the greatest difficulty he could foresee in connection with the carrying out of this scheme was that of getting the service of really competent teachers, particularly during the next year or so. The reasons were too obvious to need discussion. How could those difficulties be overcome? The first and most practical way was to considerably increase the rate of remuneration. With certain notable exceptions teachers—not necessarily those who give instruction in painting, but teachers in general—had thus far been paid for their services at a rate which he thought disgraceful. Let directors of classes offer a fair, nay a tempting rate of pay, and the best men would come forward to give the youngsters the benefit of their knowledge and experience. It was hopeless to expect them to do so otherwise.

The general instruction could and should be supplemented by an occasional lecture, address or demonstration by an employer who is an expert in some particular branch. For example, an employer might be a skilful letterer, a gilder or a grainer, or he might be particularly well qualified in the subject of colour harmony or the management of colour. He believed that among master decorators there were many having such expert knowledge who would willingly give their time for say a couple of hours once in three months, for the benefit of the rising generation. He reminded them that times had changed, our hearts had been softened by adversity and we realised that the future of the craft of decoration depended upon those who were to follow us, upon our sons and their sons, upon the men we employ and their sons and grandsons. Surely it was not too much to hope that narrow-minded selfishness was to a great extent a thing of the past and that true generosity of the individual for the good of the many should be the ruling guide of the future.

The speaker then dealt with the practical or technical instruction of the painter and decorator at some length, and gave extracts from the City and Guilds of London Institute syllabus, which was revised by a special committee, and which now consists of three grades, each being intended to follow a course of instruction of at least one year. The first grade in the subject consists of a written examination only, and the other two of practical examples in addition. Freehand drawing, plane and solid geometry, the measurement of simple areas as required by painters and decorators, weights and measures used for painters' materials, are essential features in the first grades, as are also instruction in relation to the general principles of the importance of personal cleanliness to preserve health, and of shop cleanliness to avoid waste. It was pointed out that the application of paint, distemper, &c., had great hygienic value in addition to the object of beautifying and preserving, and it was suggested that teachers should drill these facts into the young student.

The lecturer spoke at some length upon the necessity of giving the young decorator ample instruction in colour and colour harmony, as well as to mixing and matching colours. The properties and uses of the principal pigments, thinners and driers used in painting, and the necessity of varying the ingredients of the priming coat according to the material to which it is to be applied, paint removal, knotting, priming, stopping, filling-up and surfacing were other and necessary parts of instruction in the first grade.

In the second grade the necessity of a knowledge of building construction was insisted upon, particularly in connection with the significance of plinths, cornices, friezes, architraves, corbels, string courses and other similar features, and their colour and treatment. The practical test is arranged in such a manner as to bring out the individual talents of the student. It consisted of one obligatory test on the selection and harmony of colours, and two others to be selected from the following branches:—Preparation of plain painting, enamelling and varnishing, stencil cutting and stencilling, plain and ornamental lettering, a simple decoration in oil and distemper, graining and marbling. In the third or final grade one or two items were selected as being of the greatest importance. Drawing and design includes the preparation of decorative designs and working drawings. Under Architecture is included the orders and styles of architecture and their predominating features, the periods and styles of decoration and their chief characteristic details. Under the head of "General Principles" are the management of men and work, preparation of specifications of work for given purposes and under given conditions. The following is the item relating to colouring:—Colour in its larger aspects as related to some definite position or purpose; the consideration of external factors and their effects, *e.g.*, lighting, distance, or point of view, pre-existing coloured objects; the proper expression of structure and surface in architecture, *e.g.*, the distribution of such colour values as shall sustain mouldings or members according to their relative importance and purpose; the power of colour to sustain, over-ride or modify the effects of architectural arrangement in their final settlement of proportions.

The other parts of the syllabus include materials, practical and simple chemical tests; lettering includes writing and embossing, gilding and colouring on glass, the elements of heraldic painting and illuminating; decorative processes includes polychromatic stencilling, matt and burnish gilding, gesso and tapestry painting. Staining includes ornamental and decorative staining and comparative value of water, oil and spirit staining, while varnishing includes the different processes of felting down and hand polishing.

The practical test is arranged on the same basis as grade 2, viz., one obligatory test on the selection of harmony of colours, and two others to be selected from subjects enumerated below, of which there are nine, and are as follows:—

(*a*) The preparation of a design for decoration.

(*b*) The preparation of full-size working drawings and partial execution in colour from a scale black and white sketch.

(*c*) The arrangement and execution of a decorative signboard in colour and gold.

(*d*) Writing, embossing and gilding on glass, wood, plaster, and other surfaces.

(*e*) The painting and stencilling of a panel or frieze from given directions.

(*f*) The execution of examples of specified woods and marbles.

(*g*) The execution of a panel decorated by one of the processes included in the syllabus for the written examination and specified by the examiners.

(*h*) The matching and harmonising of named colours, tints or shades upon a moulded panel, and the finish of the panel in varnish or other specified manner.

(*i*) The painting of ornament in monochrome from a cast.

The speaker urged that the City and Guilds of London Institute examination in the Final or Honours Grade, although excellent in itself, was not the highest point at which the student should aim, and he suggested that it should be continued by those competent to take a degree of Bachelor of Art in Decoration, which might be granted by one or more of the Universities in the same way as it is already granted in architecture at Liverpool, Manchester, and elsewhere. The difference, however, would naturally be that more attention would be given to the study of ornament and colour and less to construction.

It was probable that it would be necessary for a student to matriculate so as to show his knowledge of English, elementary physics, or chemistry, together with a knowledge of Latin or Greek, and, at least, one modern language. The history of Greek and Roman art, in fact of art generally, and of ornament, drawing and design would necessarily be included; in fact his idea was simply to carry the final examination in the City Guilds to a high stage and to add to it something of the nature of a matriculation, so as to indicate a thorough general education.

Mr. Mawer C. Cowtan, who occupied the chair, proposed a vote of thanks which, after a lengthy discussion, was carried by acclamation.

THE BUILDING TRADE.

"COST PLUS PERCENTAGE" BUILDING CONTRACTS.

LEGAL EFFECT OF CANCELLATION.

By E. J. RIMMER, M.Eng., B.Sc., Assoc.M. Inst.C.E., of Lincoln's Inn and the Northern Circuit, Barrister-at-Law (late Division Officer, Royal Engineers).

IT is only by the introduction of this "cost plus percentage" system of contract that the independent action of the building owner in respect of the direction and limitation of the work to be carried out—even to the extent of wholesale cancellation of the comtemplated work—has been secured.

It is the purpose of this article to consider how far the so-called "Breaking Clause"—which may not be a clause at all, but a term implied by other clauses of the contract—is effective and what claims, if any, the contractor may put forward in respect of:—

(*a*) Loss of profit in respect of cancelled work, and

(*b*) Loss of anticipated revenue from plant supplied.

Under pre-war conditions few contractors would have embarked blindly upon an undertaking to build without limitation, or with the power in the hands of the building owner to stop his work at will; but under the cost plus percentage contract, or, as it has been termed, "a profit under any circumstances contract" (the question being merely one of *how* profitable the undertaking will be) the contractor has been prepared to enter into it without consideration of its extent or limitation.

The nearest approach to an undertaking of this nature in any other form of contract, is a purely schedule contract for jobbing, or for the supply of manufactured articles, such as the War Office Triennial and D.F.W. Contracts.

In the jobbing contract, however, the value of the work to be ordered at any one time is invariably limited, and in the cases of both the jobbing and the supply of goods contract, the time in which the contract runs is clearly defined. Moreover, in these cases, when once an order is given defining the work to be done or the material to be supplied, it becomes a definite contract which cannot be cancelled without obligation.

The purport of the "Breaking Clause" in war construction contracts is perfectly clear. When the contract is placed, the scope of the work may not have been finally determined nor the plans prepared, while at any time the necessity or utility of continuing construction may cease to exist. While in pre-war contracts an abandonment of the work, or such a modification of it as to destroy the general scheme of work contemplated—notwithstanding the Variation Clause—would immediately give the contractor a cause of action for damages, including a claim for loss of profit, the "Breaking Clause" has been incorporated in recent war contracts for the express purpose of defeating any such claim.

In considering the legality of cancellation, one should first consider what was, at the time of the signing of the contract, the work contemplated by the contract.

In pre-war contracts, contract drawings clearly indicating the completed work, or bills of quantities stating the estimated quantities of the work, were invariably provided and incorporated in the contracts; but in the war contracts the undertaking is usually one to construct a building or a series of buildings without exact definition—such as "In accordance with drawings, specifications and instructions *to be issued*."

At the same time this contract clearly contemplates the issue of such drawings and instructions, and, therefore, upon the issue of them the work may become clearly defined. Moreover, the contract, without incorporation of plans and quantities, may be quite precisely defined in a few words, such as "a similar building to that already constructed at ——." Another case also precludes any doubt as to the amount of work contemplated, viz.:—the case where, in accordance with the terms of the contract, the supervising engineer has staked out the buildings to be erected and given instructions for their construction to proceed.

All these matters must then be considered in the definition of "work contemplated by the contract," and it is quite clear that in respect of work not clearly contemplated no claim can be made by the contractor upon cancellation, and his right to claim in respect of work definitely contemplated depends upon there being any express or implied term of the contract empowering the building owner to cancel such work or not.

With express terms we cannot deal in this article. They vary in different contracts and speak for themselves; but, quite apart from an express cancellation clause, there may be other terms which are inconsistent with the contractor's claims for damages, and which may, when the matter is tested before the courts, be held to give the building owner a right to cancel the contract.

The court will look at the contract as a whole; it will read every clause in its relationship with the others, so that although the work which the contractor would be bound to carry out has become clearly defined, he should pause before concluding that cancellation of this work gives him any right to claim compensation from the building owner.

What has the building owner agreed to do under the contract? Can it be said that he only agreed to allow the contractor to carry out such work as was specifically ordered from time to time, and that he did not bind himself to have the work contemplated by the contract carried out at all? The mere fact that the contractor's profit and expenses are determined by taking a fixed or varying percentage on the prime cost of the work does not in any way justify this point of view of the contract. The method by which payment is to be made to the contractor is quite outside the determination of the scope of the contract, and the cost plus percentage form of payment can be applied equally to a definite as to an indefinite amount of work.

The agreement by the building owner is, unless there be any term of the contract to the contrary, an undertaking to allow the contractor to carry out and to pay him for the work contemplated by the contract at the time it was signed and for work which, by operation of the contract, has become contemplated work before cancellation.

Where, therefore, the building owner has merely accepted the terms of the contractor's tender, by writing across it his acceptance, or by an unqualified letter of acceptance, and there is no express cancellation clause, nor term in the conditions incorporated with the tender authorising the cancellation, this acceptance by the building owner is an undertaking to pay for the work which the contractor has tendered to carry out.

In this case, if the cancellation is made, the building owner must pay damages for breach of that undertaking.

On the other hand, it may be specifically stated in the terms of the contract, or in the acceptance of the tender, that the building owner shall pay for the work "executed under the contract," and that the execution of the work shall only be carried out under definite orders as to commencement, suspension or stoppage given from time to time on behalf of the building owner.

In this case such clauses may be inconsistent with the rights of the contractor to carry out all the work contemplated by the contract, and it may be contended that the proper interpretation of the contract as a whole giving proper effect to these clauses is—

(*a*) That the amount of work contemplated is entirely indefinite;

(*b*) That the recital of work contemplated in the tender is only a description of the class of work and not the amount;

(*c*) That amounts of work contracted for only become defined by definite orders for execution given from time to time and not by the issue of plans alone; and

(*d*) That definite orders to execute work can be cancelled by definite orders to suspend.

In this case, however, the court will require to satisfy itself by a consideration of all the terms that the definite orders to commence any portion of the work, did in fact, constitute a condition precedent to the contractor commencing that work, and that orders to suspend or stop construction were not merely intended to refer to temporary suspensions or stoppages.

Without discussing any particular contract, this article only allows the broadest consideration of the subject, but, in conclusion, it is necessary to remind ourselves that the Court, in construing a written contract, may only consider its terms as contained in the written document itself and without consideration for any of the circumstances under which it was made. It cannot, for example, take into account the fact that the contract was made under any more exceptional circumstances than those which appear on the face of the document itself.

Our next consideration is the claim of the contractor upon work being cancelled.

Claim for Loss of Profit.

(i) *In respect of work not actually ordered by the building owner.*

The legality of this claim is entirely dependent upon the building owner's right to cancel. If cancellation be legal, there can be no claim for loss of profit; if illegal, loss of profit in respect of cancelled work not ordered, but clearly contemplated by the contract, may be claimed.

The measure of this claim is the percentage profit on the estimated cost to which the contractor would have been entitled under his contract, less the contractor's estimated expenses, which are by the terms of the contract excluded from his prime cost in carrying out the work.

In estimating these expenses reference must be made to the definition of "prime cost" and the items excluded by this definition.

(ii) *In respect of work ordered by the building owner, but in regard to which no steps have already been taken by the contractor to carry out.*

This claim also is entirely dependent upon the legality of cancellation, and the only difference between this and the previous case is that in the latter there can be no dispute about the extent of the work contemplated.

(iii) *In respect of work ordered by the building owner for which the contractor has placed his orders for material.*

In the case of illegal cancellation, claims can, of course, be made. In the case of a legal cancellation, the important and difficult question to be decided is, whether the contractor has carried out his duties in respect of the work for which his percentage profit is payable, or not.

He is obviously entitled to his percentage upon any amount paid to manufacturers of material in respect of their cancellation of the order, but further than that, it may be urged that he—the contractor—has done what was required of him to earn the percentage profit on the full cost of the goods, viz., the obtaining of tenders, placing of orders, &c., and is therefore entitled to his percentage profit.

On the other hand, it may be similarly contended on behalf of the building owner that the contractor's duties have not been completed in respect of this business until the goods have been

delivered on to the ground, checked and handed over to the building owner (incorporation into the work is not usually a condition precedent to the claim for payment and percentage profit on the materials supplied), and that the contractor is only entitled to a *quantum meruit* of his profit in respect of the duties he has already carried out before cancellation.

(iv) *In respect of materials ordered or supplied by the building owner.*

Many war contracts reserve the power of the building owner to order on to the job for incorporation into the work material direct from supplies or manufacturers, and while in some cases the building contractor is not entitled to any profit on these supplies, other contracts specifically reserve for the building contractor a special percentage on this value. In this case the question arises upon cancellation of the main contract and the consequent cancellation of orders placed by the building owner for material whether or not the building contractor can claim the percentage profit on the value of cancelled goods.

In considering this question, it should be remembered that the purpose of the allowance is to provide a guarantee to the contractor that the most profitable part of his contract shall not be lost to him by the wholesale direct purchase of material by the building owner. It is, therefore, doubtful whether the building contractor does anything, or is intended to do anything, to "earn" this percentage, and it is extremely difficult to say at what stage in the supply of this material the profit percentage becomes due and payable to the contractor. On the one hand it may be contended that delivery of the materials on the works fixes the time, because it is then that the contractor first handles the goods, and on the other hand the contractor may urge that his profit attaches immediately the order is placed by the building owner. For this latter view it may be said that had the building owner not ordered the goods the contractor would have done so, and would by so doing have earned the profits as explained in the preceding paragraph.

Claim for Loss of Anticipated Revenue from Plant Supplied.

Under many war contracts this may be a very serious question, even where the cancellation is perfectly legal. Where it is illegal, a reasonable claim can be made in respect of all the contractor's plant, but when legal this claim cannot be sustained unless there is a collateral contract to the main contract, under which the plant is supplied.

This collateral contract sometimes appears in the case of the building owner requiring the contractor to supply special plant or manufactory for the work and giving an undertaking, express or implied, to use the plant for a fixed or reasonable period.

Under the usual terms of a building contract, the plant to be hired is nothing more than that which a contractor for the work contemplated can reasonably be expected to supply. This he supplies under the conditions of the main contract and the building owner's power of cancellation applies to this as to other work.

On the other hand, cases are numerous in which contractors have been asked to lay down plant, either at their own yards or on the site of the works, for some special manufacture, and it is to be doubted if the general cancellation of the work will free the building owner from liability for hire of this plant. Everything will, of course, depend upon the terms of the contract under which the plant is laid down; but it may be urged that the hire of this special plant was collateral to the main contract for the building work or the manufacture of the article, in which a term must be implied to use the plant for a reasonable period.

A "reasonable period" would, in such a case vary. If the plant became wholly or comparatively useless on the cancellation of the main contract, the reasonable period would be one which would allow of a proper return for the whole or part of the value of the plant. If, on the other hand, the plant were of a kind which could be adapted for use on other work, the reasonable period would be reduced on this account.

Conclusion.

The above is a general consideration of the legal effect of cancellation of building contracts, but in the circumstances surrounding the recent wholesale stoppage of building work on the occasion of the cessation of hostilities it is anticipated and, in fact, experienced, that contractors generally are not, except in special circumstances, insisting in all respects upon their strict legal rights. The future of the building trade shows such promise of a steady and lucrative activity amongst building contractors and manufacturers that they are in a position to waive readily any legal rights which give them an undue advantage in the present extraordinary situation.

FALLING PRICES OF MATERIALS.

THE report of the Committee on "Financial Risks attached to the Holding of Trading Stocks" is now published by the Ministry of Reconstruction. The Committee were appointed early last year by Dr. Addison, who recognised that fear on the part of manufacturers and traders of losses, due to a fall in prices of raw material bought at war-time prices, would tend to cause a reluctance to embark on full-scale production after the war, and would thereby retard the attainment of maximum national productiveness. He accordingly invited the Committee to enquire and report as to any measures which could be adopted with a view to securing that manufacturers and others should be financially in a position to hold stocks after the war, and that reasonable safeguards should be established to prevent serious financial losses as a result of possible depression following on a period of great inflation in respect of stocks of materials required for industry.

After illustrating the enormous rise during the war in the prices of raw materials and goods, the Committee express the view that apprehension of loss due to a drop in prices is well founded. Five main causes are likely to bring about this fall:—

(1) The disappearance of war risk insurance, &c.

(2) Reduction of freights, due to increased availability of shipping.

(3) Fall of wages compared with the rates prevailing during the war, due to increased availability of labour on demobilisation.

(4) Additional production (due to cessation of the demand for military material) of staple articles now standing at "scarcity prices."

(5) Reduction of the note issue to restore an effective gold standard, or, in other words, "deflation" of credit.

A natural corollary of the trader's fear that he will lose through falling prices is that he should wish to take a very conservative valuation of his unsold stocks. This affects their valuation for the determination of excess profits duty.

The three lines of possible relief that have been suggested by traders are:—

(1) Lower rates of taxation during the war.

(2) The Government to bear a share (out of taxes already received) in any losses after the war.

(3) A redefinition of "profits" now chargeable to taxation by way of permission to create reserves before arriving at the sum chargeable to taxation as profits, or by the adoption, when making up periodical accounts, of different principles of valuing stocks from those generally obtaining in industry hitherto, or admitted by the taxing authorities.

Up to the present taxation relief has been granted by two concessions contained in the White paper (Cd.8623), viz.:—

(1) An allowance is made for the fall in the value of stocks held in the last accounting period, to the extent to which they are realised in the succeeding two years.

(2) The "Base Stock" method of valuation, *i.e.*, that of valuing a constant quantity of stock at a constant price, which is permitted in certain classes of industry wherein it is a practice of the trade.

The first concession is criticised as being (1) Unworkable, because the physical identity of the stocks sold cannot in practice be ascertained, and (2) Inadequate, as relating to only one set of sales. Only a very limited number of industries have obtained the second concession. Those which have done so will commence the post-war period with stocks valued considerably below their market price, and therefore, in the opinion of the Committee, have established no further title to relief.

The Committee preface their general recommendations by saying they regard it as most desirable that the position of industry should be specially strengthened when on the threshold of a period in which markets have to be reorganised or created and in which industrial conditions are in the highest degree uncertain. The most hopeful line of approach to a solution of this problem lies, they think, in a reduction of the present rates of excess profits duty. The present 80 per cent. duty, they consider, encourages extravagance and discourages enterprise, the reward being paltry, while little margin is left for renewals, development, and the capture of new markets, to say nothing of the establishment of reserves against bad times.

The Committee recommend two alternative remedies:—

(1) A reduction in the Excess Profits Duty from 80 per cent. to 65 per cent. for the accounting period approximating to the year 1918 now in course of assessment, on the understanding that the duty so remitted is retained in the business and not distributed. This reduction might be accompanied by the withdrawal of the first concession in the White Paper, which was largely a result of the raising of the duty to 80 per cent.

(2) If this course is impracticable, the Committee suggest that part of the duty now to be paid should be treated as a suspensory reserve for a period of five years, the amount so treated to be represented by a special kind of War Loan to be held on joint account by the Government and the tax-payer. The amount of this reserve should be 20 per cent. of the average excess of profits in the last two years of the duty. After five years this reserve should either revert finally to the State, or, in the following circumstances become wholly or in part the property of the tax-payer.

He must show that his annual profits over that period are less than the amount of the *percentage* standard to which he was entitled or would have been entitled under Excess Profits Duty, and that these deficiencies have been associated with the holding, during this period, of stocks at falling prices as distinct, for example, from bad management or reduced turnover. He would then be entitled to relief to the extent of 80 per cent. of the deficiency; but for no greater sum than the amount of the reserve.

In the case of the second remedy the Committee consider that the undertakings given in the White Paper should continue to stand and that each business should state, when making its return for assessment for the last period of excess profits duty, whether it proposes to come under the first concession in the White Paper, or, waiving all rights thereunder, to come under the five year War Loan system of relief.

A reservation by four of the ten members of the Committee expresses the view that the "base stock" method of valuation should be permitted by all traders, but that the valuation prices must not be lower than they have actually been within the trader's experience. Further, they are of opinion that if the suggested remedy by way of reduction in the duty cannot be granted, the amount of the reserve allowed in the second remedy should be at least double.

DEMOBILISATION.

No more urgent task follows upon the demobilisation of the Forces than the reinstatement in civil life of the soldiers and sailors. The number of men to be dealt with in this country alone makes the labour gigantic; but the machinery exists for performing it, and it only remains for intending employers and employees to avail themselves of their opportunity. The Employment Exchanges, assisted by the Local Advisory Committees, which represent equally the interests of both parties in every neighbourhood, have the organisation ready for use. The staffs of the Exchanges have been considerably strengthened in order to meet the extra strain thrown upon them. It is not generally known that branches have been set up to deal with discharged men only, and in a great number of cases special sections for disabled men have been established. As far as possible the work in these new additions to the Exchange system is carried on by men in the same position as those whom they are helping back to civil employment. Discharged men, with no small proportion of disabled among them, superintend the placing of discharged and disabled men. It has been found that the loss of an arm, of a leg, of two legs, and even of eyesight is no insurmountable obstacle to the performance of efficient work, given employers who will employ the men, and the Exchanges which make use of such men are patent examples of the fact that war, even when it has dealt serious bodily injuries, does not unfit the fighter for successful life as a civilian.

BOOKS.

Spon's Practical Builders' Pocket Book—A Reference Book of Memoranda, &c., for Architects and Builders. Edited by CLYDE YOUNG, F.R.I.B.A. (London: E. & F. N. Spon, Ltd., 57, Haymarket, S.W. 1.) 1918.

THIS book consists of a mass of information relating to building matters and dealing with every phase of the subject—legal, practical, and artistic. Fortunately, it is alphabetically arranged, which makes it easier to look up the particular information required. This, however, is somewhat erratically done, as under the heading of "Columns and Stanchions," cast iron only is dealt with, while, later, "Stanchions of Wrought Iron" and "Stanchions, Rolled Steel" come in their respective alphabetical positions. Under the heading of "Girders," a good deal of space is taken up with flitch beams and cast and wrought iron girders. A large part of this might be eliminated without any loss of value to the work. There are many items throughout the work dealing with reinforced concrete construction. We rather doubt, after the experience of the past three years, whether any one with that experience will endorse the opinion expressed, that, amongst other merits this form of construction possesses, that of speed of execution is one.

Taking the work as a whole, it will be found a useful work of reference; at the same time, some of the information given is slightly out of date, and we would suggest that it is quite possible to shorten the work with advantage.

A Good Diary.

We are glad to welcome the 38th issue of the Architects' and Surveyors' Diary, by Messrs. Waterlow Bros. & Layton. Such a well-produced diary is doubly welcome at the present time. It is issued in two ways—one at 5s. and one at 7s. 6d., according to the diary space and binding. The information conveyed in it and the well-arranged pages for diary, accounts, &c., make this a model volume of its kind. Very ample space is given to the diary portion, and at the end of the volume will be found the London Building Act 1894, the Amended Act 1905, Public Health Amendment Act 1907, Housing and Town Planning Act 1909, the Regulations of the London County Council, Architects' Charges, Weights and Measures, &c.

COMPETITIONS, CONTRACTS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk (*) are advertised in this number. Contracts iv; Competitions iv; Public Appointments xxxii; Sales by Auction xxxiv. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender or the names of those willing to submit tenders, may be sent in.

BUILDING AND PAINTING.

JANUARY 25.—**Harrogate.**—PAINTING.—The Harrogate Corporation invite tenders for external painting at the Royal Hall and Spa Rooms and the Registrar's house at the New Cemetery; also internal painting and decorating at the Royal Pump Room and annexe. Specifications of Mr. C. E. Rivers, Borough Engineer, Municipal Offices.

JANUARY 27.—**Manchester.**—OFFICE, &C.—The Public Health Committee invite tenders for parcel office and conveniences at Stockport-road, Levenshulme. Specifications at the office of the City Architect, Town Hall, Manchester. Deposit £1.

JANUARY 29.—**Loughborough.**—PAINTING.—The T.C. invite tenders for cleaning, painting, &c., parts of the town hall. Specification of Mr. A. H. Walker, borough engineer, Town Hall, Loughborough.

JANUARY 29.—**Manchester.**—REPOINTING.—The Guardians of the Manchester Union invite tenders for the repointing of the tower, &c., at their Crescent-road Institution, Crumpsall, Manchester. Specifications of Mr. A. J. Murgatroyd, architect, 23, Strutt-street, Manchester.

FEBRUARY 8.—**Stretford.**—ELECTRICITY STATION.—The Electricity and tramways Committee of the U.D.C. invite tenders for the labour and materials required in the erection of an electricity converter station in Old Trafford. Specification of Mr. Ernest Worrall, Surveyor, Stretford Council Offices, Old Trafford. Deposit £2 2s.

MARCH 31.—**Carlisle.**—MEMORIAL.—The Burial Committee of the Carlisle Corporation invite designs and estimates for a suitable memorial to be erected in the Carlisle Cemetery, in memory of the men who have given their lives in the defence of the Empire, and who have been buried in Carlisle cemeteries. The design must provide for marble panels to receive the names and regimental descriptions of 120 men, and the total cost of the memorial must not exceed £200. Mr. Henry C. Marks, M.Inst.C.E., City Engineer and Surveyor, 36 Fisher-street, Carlisle.

NO DATE.—**Ballinasloe.**—HOUSES.—The Congested Districts Board invite tenders for the erection of a number of houses in the Loughrea area. Particulars of the Board's inspector, Mr. E. McConnell, Loughrea.

NO DATE.—**Belfast.**—ORGAN CHAMBER.—The Committee of Downshire-road Presbyterian Church, Leury, invite tenders for construction of organ chamber and other improvements to the above church. Specifications of Messrs. Hobart & Heron, architects, Scottish Provident Buildings, Belfast.

NO DATE.—FULBOURN.—REPAIRS.—Tenders are invited for the repair of Fulbourn Rectory. Specification on application to Fulbourn Rectory, Cambridge.

FURNITURE, MATERIALS, etc.

JANUARY 25.—**Dorchester.**—ROAD MATERIALS.—The Dorset County Council invite tenders for granite, basalt, limestone, and tarmacadam. Forms of tender from Mr. E. H. Habgood, Act. County Surveyor, County Offices, Dorchester.

JANUARY 27.—**Newport, I.W.**—ROAD MATERIALS.—The Isle of Wight R.D.C. invite tenders for road materials for one year. Specifications of Mr. H. E. Stratton, clerk, 30, Fyle-street, Newport, I.W.

*JANUARY 30.—**Wandsworth.**—MATERIALS, &C.—The Wandsworth Borough Council are prepared to receive tenders for the supply of materials and the execution of works. Specifications of Mr. D. A. Nicholl, town clerk, Council House, Wandsworth, S.W. 18

FEBRUARY 1.—**Horncastle.**—ROAD MATERIALS.—The Rural District Council of Horncastle invite tenders for the supply of about 5,645 tons of granite and about 2,745 tons of slag, &c. Specifications of Mr. J. E. Chatterton, clerk, Council Offices, Horncastle.

FEBRUARY 3.—**Middleton.**—MATERIALS.—The Middleton Corporation invite tenders for materials and stores for the year ending March 31, 1920:—1. Granite macadam and chippings; 2. Flag rock setts, kerbs, and flags; 3. Portland cement; 4. Earthenware pipes, gullies, &c.; 5. Pitch and creosote oil; 6. Iron castings; 7. bass brooms. Forms of tender of Mr. W. M. Shimmin, borough surveyor, Town Hall, Middleton.

FEBRUARY 3.—**Renfrew.**—MATERIALS.—The Upper District of the County of Renfrew invite tenders for supplying with metal sections of road in the First or Upper District of the county of Renfrew for one year. Particulars of Mr. Robert Drummond, Road Surveyor, Fairfield, Paisley.

FEBRUARY 10.—**Rotherham.**—ROAD MATERIALS.—The R.D.C. invite tenders for one year's supply of road materials. Particulars of Mr. E. Bradbury, surveyor, Imperial Buildings, Rotherham.

*NO DATE.—**London.**—BRICKS.—The Government will shortly be placing orders for the following materials for use in connection with the Government Housing Scheme, viz.:—Ordinary or "common" building bricks, roofing tiles, roofing slates. Contractors desirous of obtaining information with a view to tendering for the above, should communicate by letter with the Secretary, Ministry of Munitions, Storey's-gate, Westminster, London, S.W. 1.

ROAD, SANITARY, AND WATER WORKS.

JANUARY 25.—**Dorchester.**—STEAM ROLLING.—The Dorset County Council invite tenders for steam rolling and scarifying on the main roads of the above county for the year ending March 31, 1920. Specifications from Mr. E. H. Habgood, Acting County Surveyor, County Offices, Dorchester.

FEBRUARY 5.—**Exeter.**—ROAD WORKS.—The County Council of the County of Devon invite tenders for works in connection with the deviation of the main road between Ilfracombe and Combe Martin, near Baments Wood. Specifications at the offices of the Council, The Castle, Exeter.

FEBRUARY 7.—**Hatfield.**—ROADS.—The Hertfordshire County Council invite tenders for surface tarring approximately 1,500,000 square yards of main roads with refined tar during the ensuing spring and summer. Particulars of Mr. J. S. Killick, County Surveyor, Hatfield.

Auction Sales.

*JANUARY 28, AND FOUR FOLLOWING DAYS.—**Ashford, Kent.**—Messrs. Geering & Colyer will sell at the Cattle Market Buildings, an extensive assortment of Canadian Army stores; and on the 6th February, at the Canadian Ordnance Depôt, Longmoor-road, Liphook, Hants, wire netting, pickaxes, tools, bicycles, bell tents, Army vehicles, &c. Catalogues (price 1s., Ashford; and 3d., Liphook) may be had of the Auctioneers, Geering & Colyer, Ashford, Kent; and Rye, Sussex.

*JANUARY 30.—**Gloucester.**—Mr. Henry Butcher has received instructions to sell Messrs. Lansley & Co.'s stock of building materials, &c. On view at Lanthony Bridge Wharf, two days prior and morning of sale. Catalogues and all particulars of Lansley & Co., The Docks, Gloucester, and Henry Butcher & Co., 63 and 64, Chancery-lane, W.C. 2. 'Phone, Holborn 2295.

*FEBRUARY 5.—**London.**—Messrs. Churchill & Sim will sell at the Great Hall, Winchester House, Old Broad-street E.C., a quantity of mahogany and hardwoods by order of Director of Contracts, Admiralty. Catalogues to be had from the Auctioneers, 22, Clements-lane, E.C. 4

*FEBRUARY 5 AND 6.—**Southport.**—Messrs. B·H & Percival F.A.I., will sell the building materials, &c., of the Grange Hospital, Roe-lane, Southport. Catalogues ready three days prior to sale. Further particulars apply to the Auctioneers, Southport.

Public Appointments.

*FEBRUARY 5.—**Stoke-on-Trent.**—The Borough Surveyor of Stoke-on-Trent invites applications for a competent junior architectural assistant. Salary £130 per annum. Applications to be sent to A. Burton, Esq. M.Inst.C.E., F.S.I., Borough Surveyor, Town Hall, Stoke-on-Trent.

Competitions.

FEBRUARY 1.—**High Wycombe.**—The Committee of the War Memorial Hospital are desirous of obtaining designs for a Hospital with the necessary staff accommodation. Architects are invited to communicate with the Honorary Secretary, J. Bailey, Esq., The Cottage Hospital, High Wycombe, Bucks.

*NO DATE.—**Bolton.**—The Housing and Town-Planning Committee of Bolton invite competitive plans for cottages. Particulars on application to Mr. E. Ll. Morgan, Borough Engineer and Surveyor, Town Hall, Bolton.

PATENTS.

APPLICATIONS PUBLISHED.*

121,145.—R. Fletcher and H. Fletcher: Slating roofs.

121,150.—N. C. F. Jensen: Preserving metallic surfaces.

121,172.—J. G. Robinson and Industrial Appliances, Ltd.: Ventilation of railway vehicles.

121,191.—W. Feldenheimer: Treatment of clay.

121,193.—C. H. Schub: Interchangeable unit system of metallic moulds for concrete construction.

121,194.—S. J. Peachy: Plastic or solid material, applicable also as a varnish lacquer, coating, or dope.

* All these applications are now in the stage in which opposition to the grant of Patents upon them may be made.

RATES OF WAGES IN THE BUILDING TRADE.

THE following are the present rates of wages in the Building Trade in the principal towns of England and Wales. It must be understood that, while every endeavour is made to ensure accuracy, we cannot be responsible for errors that *may* occur :—

	Masons.	Bricklayers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters	Masons' Labourers.	Bricklayers' Labourers.	Plasterers' Labourers.
	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
Aberdare	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/3½	1/1½	1/1½	1/1½
Accrington	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/3½§	1/1½§	1/1½§	1/1½§
Altrincham	1/6§	1/6§	1/6§	1/6§	1/5§	1/7§	1/5§	1/2§	1/2§	1/2§
Ashton-under-Lyne	1/6§	1/6§	1/6§	1/6§	1/5§	1/7§	1/5§	1/2§	1/2½§	1/2½§
Barnsley	1/3½	1/2	1/1½§	1/2§	1/1½§	1/3§	11	11	11	11
Barrow-in-Furness	1/3½	1/4	1/4	1/3½	1/3½	1/3½	1/3½	1/1	1/1	1/1
Barry	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/3½	1/1½	1/1½	1/1½
Bath	1/1	1/1	1/1	1/0½	10/½	1/1	1/-	10½	10½	10½
Bedford	1/1	1/1	1/1	1/1	1/1	1/1	10	10	10	10
Birkenhead	1/8§	1/8§ ‖	1/8§	1/8§	1/8½	1/8§	1/6½	1/4½§	1 4½§	1/4½§
Birmingham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/4½	1/2½	1/2½	1/2½
Bishop Auckland	1/2½	1/2½	1/4	1/2½	1/2½	11½	11	11	11	11
Blackburn	1/5§	1/5§	1/5§	1/5§	1/5§	1/5§	1/5§	1/1½§	1/1½	1/1½§
Blackpool	1/-	1/4	1/4	10½	8½	1/1‡‡	1/2½	8	8	8
Bolton	1/6§	1/6§	1/6§	1/5§	1/5½	1/7§	1/5§	1/-§	1/-§	1/1§
Bournemouth	1/1	1/1	1/1	1/1	1/1	1/1	1/-	10½	10½	10½
Bradford	1/4½	1/4½	1/4	1/3½	1/2½	1/5	1/3	1/2	1/2	1/2
Bridgwater	1/-	1/-	1/-	1/-	1/-	1/-	11	9½	9½	9½
Brighton	1/1½	1/1½	1/1½	1/1½	1/1½	1/1½	1/-	11	11	11
Bristol	1/6§	1/6§	1/6§	1/6§	1/6§	1/6§	1/5§	1/3§	1/3§	1/3§
Burnley	1/5§	1/5§	1/5§	1/5§	1/5§	1/5§	1/5§	1/1½§	1/1½§	1/1½§
Burton-on-Trent	1/2	1/2	1/2	1/2	1/2	1/2	1/1½	11½	11½	11½
Bury	1/6§	1/6§	1/6§	1/5§	1/5§	1/7§	1/5§	1/1½§	1/2§	1/2§
Cambridge	1/1½	1/1½	1/1½	1/1½	1/1½	1/1½	1/-	10½	10½	10½
Cardiff	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/3½	1/1½	1/1½	1/1½
Chatham	10½‡‡	11‡‡	11‡‡	11‡‡	11‡‡	11‡‡	9½‡‡	8‡‡	8‡‡	8‡‡
Chelmsford	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	11	11	11	11
Cheltenham	1/3§	1/3§	1/3§	1/3§	1/0½	1/0½	1/0½	10½	10½	10½
Chester	1/3§	1/3§	1/3§	1/3§	1/3§	1/3§	1/2§	1/-§	1/-§	1/-§
Chesterfield	1/-	1/2	1/1	11	10	11	1/-	8-8½	8-8½	8-8½
Colchester	11	11½	11½	1/-	11	1/-	9½	9½	8½	8½
Coventry	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/2½	1/0½	1/0½	1/1
Crewe	1/0½	1/0½	1/3§	1/0½	1/0½	1/2	1/0½	8	8	8
Darlington	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/2	1/0½	1/0½	1/0½
Derby	1/2	1/2	1/2	1/2	1/2	1/2	1/0½	11	11	11½
Doncaster	1/-	1/1	1/1	10½	10½	10	1/1	10½	10½	10½
Dudley	1/2	1/2	1/2	1/2	1/2	1/3	1/1	11	11	11½
Durham	1/2	1/2	1/1½	1/2	1/1½	1/10	1/0½	9	9	9
East Glam. and Mon. Valleys	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/3½	1/1½	1/1½	1/1½
Exeter	1/-	1/-	1/-	1/-	1/-	1/0½	11	10	10	10
Folkestone	1/-	1/-	1/-	1/-	1/-	1/-	10	9	9	9
Gloucester	1/0½	1/0½	1/0½	1/0½	1/0½	1/0½	11½	10½	10½	10½
Grantham	9½	10	9½	9½	10	8½	8	8	7½	8
Grays	—	1/-	1/-	—	—	1/-	10½	—	10	10
Grimsby	1/2§	1/2§	1/2§	1/2§	1/2§	1/2§	1/2§	1/-§	1/-§	1/-§
Great Yarmouth	10	10	10	10	10	10	8½	7	7	7
Guildford	1/1	1/-	1/-	1/1	—	1/1	11½	9½	9½	10
Halifax	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/-	1/-	1/-
Harrogate	1/0½	1/0½	1/-	1/-	1/-	1/2	1/1	10	10	10
Hartlepools	1/3½	1/3½	1/3½	1/3½	1/2	1/3½	1/2	1/0½	1/0½	1/0½
Hastings	11	11	11	11	11	11	10	9	9	9
Hereford	1/0½	1/0½	1/0½	1/0½	1/0½	1/0½	11½	10½	10½	10½
Huddersfield	1/3½	1/3½	1/5§	1/3½	1/3½	1/3½	1/3	1/0½	1/0½	1/0½
Hull	1/5½§	1/5½§	1/5½§	1/5½§	1/5½§	1/5½§	1/3	1/3½§	1/3½§	1/3½§
Ipswich	1/1½	1/1½	1/1½	1/2	1/2	1/2½	1/0	11	11	11
Lancaster	1/1½	1/3	1/2	1/1½	1/1½	1/2	1/1½	11	11	11
Leamington Spa	11½	1/1½	1/1½	11½	11½	1/1½	1/0½	10½	10½	10½
Leeds	1/4½	1/4½	1/4	1/3	1/3½	1/5	1/3	1/1½	1/1½	1/1½
Leicester	1/2	1/2	1/2	1/2	1/2	1/2	1/1	11½	11½	1/-
Lincoln	1/3½	1/3½	1/3½	1/3½	1/3½	1/3½	1/3	10½	10	10½
Liverpool	1/8§	1/8§	1/8§	1/8§	1/8§	1/8§	1/6§	1/4½§	1/4½§	1/4½§
Llanelly	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/3½	1/1½	1/1½	1/1½
London	1/5	1/5	1/5	1/5	—	1/5½	1/2½	1/1½	1/1½	1/1½
Loughborough	1/3½§	1/2	1/2	1/3½§	1/3½§	1/2	1/1	1/0½§	11½§	1/0½§
Luton	1/1	1/1	1/1	1/1	1/1	1/1	1/-	11	11	11
Maidstone	1/1	1/1	1/1	10	10	1/1	1/-	10	10	10
Manchester	1/6§	1/6§	1/6§	1/6§	1/5§	1/7§	1/5§	1/2§	1/2½§	1/2½§
Mansfield	1/1½	1/1½	1/1½	1/1½	1/1½	1/1½	1/0½	10½	10½	10½
Merthyr Tydfil	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/3½	1/1½	1/1½	1/1½
Middlesbrough	1/3½	1/3½	1/3½	1/3½	1/2	1/3½	1/2	1/0½	1/0½	1/0½
Newcastle-on-Tyne	1/7§	1/7§	1/7§	1/7§	1/7§	1/3	1/4§	1/3½§	1/3½§	1/3½§
Newport, Mon.	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/3½	1/1½	1/1½	1/1½
Northampton	1/1	1/1	1/1	1/1	1/1	1/1	1/	10½	10½	10½
Norwich	1/-	1/-	1/-	1/-	1/-	1/-	11	9½	9½	9½
Nottingham	1/4	1/4	1/4	1/4	1/4	1/4½	1/2½	1/1½	1/1½	1/1½
Oldham	1/6§	1/6§	1/6§	1/6§	1/5§	1/7§	1/7§	1/2½§	1/2½§	1/3§
Oxford	1/0½	1/-	1/-	1/-	1/-	1/-	11	9½	9½	9½
Plymouth	1/2	1/2½	1/2	1/2	1/2	1/2	11½¶	1:	11	11
Pontypridd	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/3½	1/1½	1/1½	1/1½
Portsmouth	1/-	1/-	1/-	1/-	1/-	1/-	11	10	9½	9½
Preston	1/4½	1/4½	1/4	1/3½	1/3	1/4	1/3½	1/0½	1/0½	1/0½
Reading	1/1	1/1	1/1	1/1½	1/2	1/1	11½	11	10½	10½
Rochdale	1/6§	1/6§	1/6§	1/6§	1/5§	1/7§	1/5§	1/2½§	1/2½§	1/2½§
Rochester	10½‡‡	11‡‡	11‡‡	11‡‡	11‡‡	11‡‡	9½‡‡	8‡‡	8‡‡	8‡‡
Rugby	1/1½	1/1½	1/1½	1/1½	1/1½	1/1½	1/0½	10½	10½	11½
St. Albans	1/-	1/-	1/2	1/-	1/-	1/-	10½	9	9	9
St. Helen's	1/6	1/6	1/6	1/6	1/6	1/6	1/3	11½	11½	11½
Scarborough	1/1	1/1	1/1	1/1	1/1	1/-	1/1	10	10	10
Sheffield	1/4	1/4	1/4	1/3½	1/3½	—	1/3	1/0½	1/0½	1/0½
Shrewsbury	1/3	1/3	1/3	1/3	1/3	1/2	1/-	1/-	11	1/-
Southampton	1/1	1/1	1/1	1/1	1/1	1/1	1/-	10½	10½	10½
Southend-on-Sea	10	10	10	10	P'cework	10	9	8	8	8
Southport	1/4	1/4½	1/5	1/4	1/4	1/4	1/4	1/-	1/-	1/-
South Shields	1/7§	1/7§	1/7§	1/7§	1/7§	1/6§	1/2	1/3½§	1/3½§	1/3½§
Stockport	1/6§	1/6§	1/6§	1/6§	1/5§	1/7§	1/5§	1/2½§	1/2½§	1/2§
Stockton-on-Tees	1/3½	1/3½	1/3½	1/3½	1/2	1/3½	1/2	1/0½	1/0½	1/0½
Stoke-on-Trent	1/2	1/2½	1/2	1/2	1/2	1/1½	1/1½	11½	11½	11½
Stroud	11½	11½	11½	11½	11½	11½	11	9½	9½	9½
Sunderland	1/7§	1/7§	1/7§	1/7§	1/7§	1/1½	1/4§	1/3½§	1/3½§	1/3½§
Swansea	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/3½	1/1½	1/1½	1/1½
Taunton	1/-	1/-	1/-	1/-	1/-	1/-	11	9½	9½	9½
Torquay	1/-	1/-	1/-	1/-	1/-	1/-	1/-	10	10	10
Wakefield	1/2½§	1/3§	1/3	1/2½§	1/2½§	1/3§	1/1	11½	11½	11½
Walsall	1/2	1/2	1/2	1/2	1/2	1/2	1/0½	11½	11½	11½
Warrington	1/6§	1/6§	1/6§	1/6§	1/6§	1/6§	1/5§	1/2½§	1/2½§	1/3§
West Bromwich	1/3½	1/3½	1/3½	1/4	1/3½	1/3	1/1½	1/0½	1/0½	1/0½
Wigan	1/6§	1/6§	1/6§	1/6§	1/6§	1/6§	1/5§	1/2½§	1/2½§	1/2½§
Windsor	1/4	1/4	1/4	1/4	1/4	1/4	1/2½	1/0½	1/0½	1/0½
Wolverhampton	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/2½	1/1½	1/1½	1/1½
Worcester	1/-	1/-	1 -	1/-	1/-	1/-	10	10½	10½	10½
York	1/2§	1/2§	1/2§	1/2§	1/-	1/-	11	11½§	11½§	11½§

The Masons' rate given is for bankers: fixers usually ½d. per hour extra. * War bonus of 2s. per week granted. † War bonus of 3s. per week granted. ‡ War bonus of 3s. 6d. per week granted. ‡‡ War bonus of 5s. per week granted. ¶ War bonus of 7s. 6d. per week granted. § These rates include the 12½ per cent. bonus. [The above rates, unless otherwise shown, are exclusive of 12½ per cent. bonus.—ED.]

NOTES FROM THE FOREIGN PRESS.

PNEUMATIC METHOD OF CONCRETING.

In the *Journal of the Western Society of Engineers* for May, 1918, Mr. H. B. Kirkland describes this new (patented) method, which consists simply in blowing batches of concrete through a pipe from a central point of supply to their place in the concrete forms. The materials for a batch of concrete (½ cubic yard) are proportioned in a measuring device and dropped into the pneumatic mixer without previous mixture. The plant for pneumatic mixing and placing comprises: (1) a mixer, (2) a pipe conveying system, and (3) a compressed-air plant.

WOOD-CONCRETE FOR DWELLING-HOUSES.

Richard Kafka discusses in *Beton und Eisen* for November 2, the possibility of the application of wood-concrete to the construction of dwelling-houses, &c. Being called upon to build a floor in a malt-house at short notice, he proposed the use of wood pillars surrounded by concrete, as wood alone could not be used owing to danger of rotting. He does not think there is any difficulty in obtaining the necessary static co-operation between the wood and concrete, and quotes some investigations of another investigator to support his view. It is necessary that the wood be dry, and, if possible, suitably impregnated before concreting, though care should be taken to see that the impregnating does not affect the concrete. It is necessary to take into account the different co-efficients of thermal expansion of wood and concrete in considering the applicability of the system to a particular purpose, otherwise the advantages of wood-concrete may be outweighed by the disadvantages. In general, the system is more suitable where no other material is available. So long as the wood-concrete does not present objections from the static standpoint, the woodwork must be dimensioned as would be the case if wood alone were used. In the actual system, increased dimensions are necessary throughout the building, owing to the space lost on account of the heavier nature of the structure generally. The advantages of wood-concrete, in the author's view, are: rapidity and cheapness of construction; the possibility of immediately placing such structures under load; the fact that alterations and even demolition can be carried out at a low cost, and that the wood recovered in the atter case can be used again. Wood-concrete is, therefore, more applicable to buildings of a more or less temporary nature, and where fire risks are not great.

CONSTRUCTION OF SMALL DWELLINGS IN HAMBURG.

It is believed that after peace is declared it will be found desirable to build a large number of small dwellings in Hamburg, as in many other German cities. A special society called the "Patriotic Union" has been formed to assist this development. The Union nominated a committee of experts in August, 1917, to consider the problem and advise upon the best procedure, and they concluded that the cost of construction must be kept as low as possible. With this end in view, they desire considerable relaxation in the building by-laws, permission for the maximum width of the streets in the quarters where these dwellings are to be built to be 5 m., the paving to be of the cheapest kind, and State and municipal aid in the acquisition of building sites by means of loans free of interest for some years, &c. They suggest that the thickness of walls should be decreased, the dwellings built in three-story blocks in rows, width of stairs decreased, and the area given up to drains diminished. They contemplate a ground area of 500 sq. metres per block, with about half devoted to garden. The cost of a block to house six families, which before the war would have been 20,500 marks, would now be 28,400 marks, but if the modification suggested above were accepted it could be reduced to 24,600 marks.—*Deutsche Bauzeitung*, Sept. 18.

PROPOSED NEW BUILDINGS AND OTHER WORKS.*

IN these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works, at the time of publication, have been actually commenced. Abbreviations:—T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; L.G.B. for Local Government Board; B.G. for Board of Guardians; L.C.C. for London County Council; B.C. for Borough Council; and P.C. for Parish Council.

ANGLESEY.—The R.D.C.'s of Aethwy, Twrcelyn and Dwyran, Anglesey, have combined for the purpose of carrying out a housing scheme for the huge area concerned, which comprises about half the county of Anglesey, and have decided to build 1,000 houses at an average cost of £450 per house. The secretary of the general body is the Hon. G. N. Irby.

AYR.—The T.C. has adopted a recommendation by the Housing Committee that a beginning be made with the erection of 36 houses for the working class in nine blocks of four houses, each containing two rooms and kitchen, with scullery, bathroom, and w.c., on ground belonging to the Corporation in George-avenue.

BATH.—Plans passed for the rebuilding of cottage at Widcombe House, and for drying shed and boiler pit at Messrs. Lock's factory, Lower Bristol-road. It is proposed by the Council to erect 250 houses, and to engage Mr. A. J. Taylor to prepare the drawings and particluars for the L.G.B.

BECCLES.—A new hospital is to be built as a war memorial.

BELFAST.—Plans passed: Alteration to shop premises, Albert-street and McDonnell-street, for Mr P. Maginn; conversion of five shops into one, Castle-lane, for Mr. T. Brand; motor house Downview-avenue, for Mr. S. Summing; store, Great Northern-street, for the Windsor Timber Co.; addition to store, Great George's-street, for Messrs. R. & W. Love; additions to stables, Short Strand, for Messrs. J. Harkness & Co.; four houses and shops and one lock-up shop, Newtownards-road, Upper, for Thornbury Bros.; motor house, Malone Park, for Mr. F. McKibben; two houses, Kimberley-street, for Messrs. H. & J. Martin, Ltd.

BOSTON.—The R.D.C. has appointed a committee to consider sites for the erection of cottages. The Council has already built 40 houses, and it is stated that 200 more are required.

BOURNE.—The R.D.C. has decided to erect about 180 houses in the different parishes of its district.

CARLISLE.—Plans for 56 houses on land belonging to the Corporation have been approved, and the Housing and Development Committee are considering offers for the erection of other 544 dwellings. The Corporation are aiming ultimately at over 2,000. There will be a garden to each house. Provision is also being made for a public garden and children's playground.

CROYDON.—A town-planning scheme to cover 1,160 acres on the Beddington and Wallington side of the Borough of Croydon is about to be submitted to the L.G.B. for approval.

DUDLEY.—In a report just issued the Housing Committee recommends the Council to purchase the land at Netherton, containing over 8 acres, from Lord Dudley, for £5,160, that a scheme be prepared for the erection thereon of 120 houses, and that application be made to the L.G.B. for their approval of the purchase and of the scheme and for sanction to a loan for the cost. They also recommend the Council to adopt a plan, prepared by the borough surveyor, showing the lay-out of the Red Hill site. Plans for the houses proposed to be erected thereon and estimates of the cost will be submitted when prepared.

DUNDEE.—Plans passed:—Petrol store for Corporation Electricity Department; alterations, Paterson-street, for Messrs. J. Paterson & Co.

ECCLESFIELD.—A meeting of workers at St. Michael's have decided to inaugurate a Working Men's Club and Institute in the village. Suitable sites were proposed, and it is estimated that at least £1,000 will be required.

GALASHIELS.—The war memorial will be an extension of the municipal buildings.

GLASGOW.—The Special Committee on the Housing and Town Planning Act, after consultation with the outside authorities interested, and considering plans submitted by the Master of Works, recommend that the authority of the L.G.B. be obtained for the preparation of town-planning schemes for two areas. One of these is an area on the southern side of the city containing about 17,088 acres, of which 6,592 are within the city and 10,496 within the county of Renfrew. The second area is on the north-eastern side of the city. It contains about 18,176 acres, of which 7,104 are within the city, 10,844 within the county of Lanark, and 228 within the burgh of Rutherglen.

GREAT CROSBY.—A plan for the conversion into flats of Selby Holme on the west side of Abbotsford-road, for Messrs. Costarn & Son, has been approved by the U.D.C.

GREENWICH.—Offices and premises of the South Metropolitan Electric Light & Power Co.

GRIMSBY.—The Great Central Railway Co. has decided to proceed with the rebuilding of the Grimsby Fish Market at a cost of £140,000. The new market is to be on the site of the old one, which is over a mile long. The work is to be done in ferro-concrete with steel lacings, and will give modern accommodation to the growing requirements of the trade.

HAILSHAM.—At a town's meeting it has been decided to erect a tombstone on the recreation ground and a public hall opposite the market as war memorials.

HALESOWEN.—Messrs. Walter Somers & Co., a large engineering firm at Halesowen, Worcestershire, whose young workers cannot marry owing to house famine, have decided on the immediate erection of a hundred houses as first instalment of a scheme to provide for their workmen. The houses are to be modern in character, and to be purchased by the workmen on favourable terms.

HAMILTON.—A scheme for the erection of 260 houses is to be pushed on by the local authority with all speed.

HAMMERSMITH.—Drainage plans passed by B.C.:—At Y.M.C.A., Shepherd's Bush Common, for Mr. J. McManus; at Leysfield-road factory, for Messrs. Green & Son; at 56, Forthville Gardens, for Mr. E. H. York.

HANDSWORTH.—There are several proposed schemes for building in the parish of Handsworth. They include: (1) A scheme for the erection of some 1,700 houses on the Ballifield Hall estate, in the neighbourhood of the junction of Carr-lane and the Worksop-road, and the Worksop-road and the Catcliffe-road. Mr. E. M. Gibbs, of Sheffield, of the firm of Messrs. Gibbs & Flockton, architects, is the architect in the matter. (2) a scheme for erecting 700 houses in Carr-lane, commencing at the old cemetery and on along towards the Worksop-road.

HOVE.—Plan passed:—Conversion of 36 Lansdowne-place into two flats. Mr. A. H. Lainson for Mr. E. Cohen.

HUDDERSFIELD.—Large schemes of house building, streetage, and sewerage improvements are being prepared by the Corporation officials. The Mayor states that the new scheme of sewers is not completed, but the Corporation is prepared to begin the Birkby sewer, which has been held up owing to the war, at once. It has now been decided that the first lots of the 1,500 houses which the Corporation recently decided upon shall be erected on the following sites: Royds-wood, Crosland-lodge, Hollin Carr, Marsh, Long-lane, Dalton, Salendine Nook (old and new sites) Yew Tree-road, Birchencliffe, Bradley, Meltham-road, Lockwood, and Waterloo.

HULL.—Plans passed by T.C.:—Co-operative Wholesale Society, alterations. Cumberland-street; W. H. Smith & Sons, new premises Jameson-street; C. D. Holmes & Co., Ltd., extensions, St. Mark's-square—Geo. Hunter, Ltd., extensions, Cumberland-street. A. G. Brown, additions, 20, Alexandra-road; A. Sanderson & Co., Ltd., sanitary accommodation, Ropery-street; British Oil & Cake Mills, Ltd., messroom, lavatory, &c., Popple-street; Humber Brass & Copper Co., Ltd., extensions, Castle-street; P. Partington, additions, Hedon-road, Marfleet; Hull Corporation, crushing sheds, Stepney-lane; C. W. Jordan, offices, &c., St. Andrew's Dock; Geo. Hunter, Ltd., chimney, Cumberland-street; Yorkshire Insurance Co., lavatory, &c., Lowgate.

ILFORD.—The U.D.C. proposes to erect about 99 houses on land to be acquired from the Office of Woods and Forests.

KINETON PARK.—The R.D.C. is negotiating with the Duke of Leeds and Mr. R. H. Goacher for sites for working class houses.

LAMPETER.—Mr. Yockney, railway engineer, has met representatives of the T.C., Chamber of Trade, Llancrwys, and discussed the question of constructing a railway from Lampeter to Llandilo. The representatives were unanimous in favour of a railway as it would open up a rich agricultural district. It was resolved to invite delegates from the County Councils and all public bodies from Aberayron to Llandilo to a conference.

LEEDS.—The Development Committee has decided to raise no objection to the Markets Committee taking the cleared site in Geldard-road for a new cattle market.

LYTHAM.—The U.D.C. is to make a request to the L.G.B. to be allowed to proceed with the construction of a marine swimming bath and the extension of the promenade.

MILNGAVIE.—The T.C. has been informed that the ground on the Mains estate which it wanted for working class houses has been selected by Mr. Campbell Douglas for the erection of villas.

NEWPORT (MON.)—it is proposed to erect a new wing to the Royal Gwent Hospital as a war memorial.

NEWPORT (Shropshire).—Plans passed: Buildings at Chetwynd Cemetery.

NEW ZEALAND.—A proposal to construct a new wharf at the end of the Freeman's Bay reclamation, near Aucland, has been placed before the Auckland Harbour Board. The cost of the landing is estimated from £40,000 to £50,000.

NORTH WALSHAM.—A Committee has been appointed by the U.D.C. to enquire into the number of houses required and as to available sites.

PERTHSHIRE.—The District Committee will erect 12 houses at Scone and 6 at Bridge of Earn.

PETERBOROUGH.—It has been decided that the local war memorial shall take the form of a new infirmary at a cost of not less than £50,000 or more than £70,000.—The Peterborough R.D.C. has decided to make application to borrow £125,000 for the erection of 275 workmen's houses chiefly in the villages of Walton, Caston, Helpston Northborough Glinton and Maxey.

PINCHBECK.—It is proposed to erect a war memorial to the memory of those who have fallen in the war. Mr. W. S. Royce, of Pinchbeck Hall, M.P. for the Holland Division has offered a site and also a donation of £100. The proposal is that a monument should be erected on a site near the church, on the lines of a memorial erected in South Africa which was built by Mr. Royce.

PLYMOUTH.—Plans passed: Garage, 31, Beaumont-road, for Mr. F. W. Bracken.

PORTSMOUTH.—Plans passed by T.C.:—Room, King's Theatre, Southsea for the Portsmouth Theatres Co., Ltd.; alterations, 467, Commercial-road, for Mr. J. T. Crampton; garage 2, St. Ronan-road, for Mr. J. F. White; rebuilding of front of "Ship Anson" public-house on the Hard, for Messrs. Buckwood, Ltd. The P.T.C. has resolved to clear a noted slum area, on which it is proposed to build houses on the two-decker plan to let at 4s. 6d. to 6s. 6d. per week.

PORTADOWN.—At a meeting of the Select Vestry of Portadown Parish it was decided to launch a scheme for the enargement of St. Mark's Church and the building of a tower.

RETFORD.—At a special meeting of the T.C., Mr. Broomhead, of Lincoln, was appointed architect to carry out the housing and town-planning scheme. Suitable sites have already been secured, and 150 houses are to be proceeded with as an instalment of the scheme.

RICEALT.—The R.D.C. have had submitted to them plans for the erection of sixty-four houses on the Barlby-road, between the East Riding village of Barlby and Selby, in connection with the new industries which have been established close to the town of Selby.

ROTHERHAM.—Proposals are made to alter the "Sportsman Inn" and the magistrates have requested Mr. W. M. Gilchard to submit fresh plans.

SALFORD.—The Housing Committee is placing before the Council, schemes for the erection of 250 houses in the north of the borough and 250 in the west, and for the northern scheme has selected a site on the Littleton-road estate offered by the Trustees of the Clowes Settled Estates at £400 an acre, or about £28,000 for the whole plot of 70 acres. The area is more than is required for the erection of 250 houses, but as there is every probability that further developments will be required, and as the price is reasonable, the Committee has decided to purchase the whole of the plot.

SHEPPEY.—A Special Committee of the Kent C.C. recommend a scheme which involves the building of a new bridge, carrying a double track of rails—instead of the present singe line—and a wide road for vehicular traffic, over the Swale at Elmley Ferry, east of Sittingbourne, which would shorten the road to Sheerness.

SILLOTH.—A proposal is on foot for a railway along the Cumberland coast connecting Silloth, the seaside resort on the shores of the Solway Firth, with Maryport and the industrial district of West Cumberland.

SOUTHWARK.—Drainage plans passed by B.C.: At St. George's Hall, Westminster Bridge-road, for the Catholic Church Army; at O.T. Works, Rushworth-street, for the O.T. Co., Ltd.; at Field Coffee Roasting Works, Bear Gardens, for Mr. G. Lambert.

SOUTHWOLD.—The T.C. has passed plans of alterations and additions to Eversley School.

SOUTH SHIELDS.—Plans passed by T.C.: Billiard room, lavatory and motor-house, Stanhope House, Westoe, Mr. J. H. Morton for Major S. Readhead; workshop, offices, &c., Ellesmere-street and Heughterrace, for Mr. J. Carruthers.

STEPNEY.—Erection of additions to factory, King Edward-street, Mr. W. Stewart, for Martineau's, Ltd.

TAUNTON.—The T.C. is asking the sanction of the L.G.B. for the loan of £8,255 for the purchase of sites for housing.—The Borough Surveyor has been asked to submit plans and estimates for the construction of a road and bridge from Purdley across the river Tone into Station-road, and a bridge over the river opposite French Weir-avenue to a road entering the Wellington-road through Long Run-lane.

WAYLAND.—The R.D.C. has decided to build cottages in the following parishes:—Stow Bedon 4, Breckles 4, Thompson 4, Tottington 4, Scoulton 2, Ovington 2, Watton 6, Merton 2, Shropham 4, Attleborough 24, Besthorpe 2, Wilby 6, Banham 5, Kenninghall 12, Eccles 2, New Buckenham 3, Old Buckenham 6 (and if houses unfit for habitation are demolished 6 more in the last named parish).

WICK.—At a meeting of the Harbour Trust a letter was submitted from Messrs. Semple & Christie, Edinburgh, applying for ground near the old Breakwater for the purpose of erecting a factory for the production of fish food, oil, and artificial fertilisers. The application was remitted to the Works Committee.

WINDSOR.—Alterations, 25, High-street, for the London City and Midland Bank.

WOLVERHAMPTON.—Steps are being taken to erect a public hall as a war memorial.

WORCESTER.—The Education Committee has decided to acquire the Thames House site at Barbourne for the proposed City and County Secondary School for Girls. The cost is £3,000, and the site contains sand and gravel, to be utilised in the buildings, which are expected to cost £40,000.

WORKSOP.—A towns meeting has decided on the erection of a monument "to be surmounted by a German gun" in Victoria-square, and the enlargement of the Victoria Hospital as war memorials.

WORTHING.—The T.C. proposes purchasing about nine acres of land from the Charity Commissioners. One acre will be reserved for a school and on the remainder 70 houses will be erected.

FIRES.

ARBROATH.—A destructive fire has occurred at the chemical works at Elliot, near Arbroath, belonging to Messrs. Wm. Briggs & Sons, Ltd.

DUNDEE.—Fire broke out last week in the premises of the Dundee Eastern Co-operative Society, Seagate, and damage to the extent of £3,000 was occasioned.

LONDON.—Destructive fires have occurred at the premises of Messrs. Weber, Smith and Hoare, New Crane Wharf, Walling High-street, and at premises occupied by Mr. H. J. Bishop, at 16, Homerton Row, Homerton.

*See also our List of Competitions, Contracts, etc.

PRICES CURRENT OF MATERIALS.*

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.—Ed.]

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.	£ s. d.
Best Stocks	3 3 6

Per 1000, Delivered at London Goods Stations.	£ s. d.		£ s. d.
Flettons	2 7 11	Best Blue Pressed Staffordshire	7 18 6
Best Stourbridge Fire bricks	9 5 0	Do. Bullnose	8 3 6
		Blue Wire Cuts	6 13 6
GLAZED BRICKS—			
Best White, Ivory, and Salt Glazed Stretchers	17 17 6	D'ble Str'tch'rs	23 7 6
Headers	17 7 6	D'ble Headers	20 7 6
Quoins, Bullnose and 4½in. Flats	21 7 6	One Side and two Ends	24 7 6
		Two Sides and one End	25 7 6
		Splays and Squints	22 17 6

Second Quality, £1 per 1,000 less than best.

Glazed bricks priced at so much each, 50 per cent. advance on list.

Permission to be obtained from Director of Supplies for Flettons, Wire Cuts, &c.

	s. d.	
Thames Ballast	17 0	per yard, delivered
Pit Sand	16 0	
Thames Sand	17 0	„ „ 2 miles
Best Washed Sand	17 0	„ „ radius
½in. Shingle for Ferro-Concrete	15 0	„ „ Paddington.

Per ton, delivered in London area.	£ s. d.		£ s. d.
Best Portland Cement	3 8 0	..	3 11 0

Do. 6l/- alongside at Vauxhall in 80-ton lots.

Ferrocrete 2s. 6d. per ton extra on above.

Best Ground Blue Lias Lime 2 2 6 at rly. depot.

NOTE.—The cement or lime is exclusive of the ordinary charge for sacks. The sacks are charged at 2s. 6d. each and credited at 2s. each if returned in good condition within three months.

Grey Stone Lime ..... 47s. 0d. per ton delivered.

Stourbridge Fireclay in s'cks 37s. 6d. per ton at rly. dpt.

STONE.

	s. d.
BATH STONE—delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube	2 0
Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube	2 1½
Do. do. delivered on road waggons at Nine Elms Depot	2 2½
PORTLAND STONE—	
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Mileage Station G.W.R., per ft. cube	2 10½
Do. do. delivered on road waggons at above stations, per ft. cube	2 11½
White basebed, 2d. per ft. cube extra.	
NOTE.—½d. ft. cube extra for every foot over 20 ft. average.	

RANDOM BLOCKS—Per Ft. Cube, delivered at Rly. Dpot.	s. d.		s. d.
Ancaster in blocks	2 10	Closeburn Red	
Beer in blocks	1 9	Freestone	3 0
Grinshill in blocks	2 6	Red & White Mansfield random block	4 8
Darley Dale in blocks	2 10	Yellow Magnesian Limestone do. do	3 9

YORK STONE, BLUE—*Robin Hood Quality.*

Delivered at any Goods Station London.	s. d.	
Scappled random blocks	5 8	Per Ft. Cube
6 in. sawn two sides landings to sizes (under 30 ft. super.)	4 6	Per Ft. Super
6 in. rubbed two sides, ditto	4 11	„
3 in. sawn two sides slabs (random sizes)	1 11	„
2 in. to 2½ in. sawn one side slabs (random sizes)	1 3	„
1½ in. to 2 in. ditto, ditto	1 1	„

HARD YORK—

Delivered at any Goods Station London.	s. d.	
Scappled random blocks	4 9	Per Ft. Cube
3 in. sawn two sides landing to sizes (under 40ft. super.)	4 0	Per Ft. Super
6 in. rubbed two sides ditto	5 0	„
in. sawn two sides slabs (random sizes)	1 11	„
2 in. self-faced random flags	6 0	Per Yard Super

WOOD.

TIMBER CONTROL ORDER, 1918.

Pursuant to paragraph 3 of the Timber Control Order, 1918, the Controller of Timber Supplies hereby gives notice that until further notice the following shall be the maximum prices at which imported timber may be sold. These prices are per standard landed and in store.

WHITE SEA REDWOOD

	1st £	2nd £	3rd £	4th £		1st £	2nd £	3rd £	4th £
4 × 11	59	57	55	53	2 × 9	53	51	49	47
4 × 9	56	54	52	50	2 × 8	52	50	48	46
4 × 8	53	51	49	47	2 × 7	52	50	48	46
4 × 7	53	51	49	47	3 × 6	unsorted 47			
2½ & 3 × 11	58	56	54	51	2½ × 6	unsorted 47			
2½ & 3 × 9	53	51	49	47	3 × 5	unsorted 46			
3 × 8	52	50	48	46	2½ × 5	unsorted 46			
3 × 7	52	50	48	46	2 × 6	unsorted 47			
2½ & 7/8	52	50	48	46	2 × 5	unsorted 45			
2 × 11	58	56	54	51	2 × 4	unsorted 45			

UNSORTED LARCH WOOD at 3rd Archangel Redwood Prices.

Boards, 1st and 2nd, £2 10s. extra.

Boards, 3rd and 4th, £1 10s. extra.

WHITE SEA WHITEWOOD.

	1st £	2nd. £	3rd. £		1st. £	2nd. £	3rd. £.
3 × 11	57	55	50	3 × 8 u/s	48		
3 × 10	54	52	49	3 × 7 u/s	48		
3 × 9	52	50	48	2½ & 2 × 8 u/s	48		

	£ s. d.		£ s. d.
2½ & 2 × 7 u/s	48 0 0	2½ × 5 u/s	46 0 0
3 × 6½ u/s	47 10 0	3 × 5 u/s	46 0 0
2 × 6½ u/s	47 10 0	2 × 5 u/s	45 0 0
2½ & 3 × 6 u/s	47 0 0	2 × 4 u/s	45 0 0
2 × 6 u/s	47 0 0		

Boards, £1 10s. extra per std.

WOOD (*Continued*).

FEATHER EDGED BOARDS, £50 per std.

SAWN LATHS, 3s. 9d. per bundle.

U/S SLATING BATTENS (yellow and white and strips), £44.

5th ditto, £42.

SWEDISH AND NORWEGIAN FLOORING AND MATCHING.

U/S Red and White.

Per 100ft. super.	Per 100 ft. super
1½in. P.E. at 71/6	½in. P.E. at 37/-
1¼in. P.E. at 60/-	¼in. P.E at 31/-
1in. P.E. at 47/-	⅛in. P.E. at 23/-
⅛in. P.E. at 41/-	

If tongued and grooved or tongued and grooved and matched, 9d. per square extra.

1in. × 11in P.E at £54	1in. × 9in. P.E. at £51
1in. × 10in. P.E. at £53	1in. × 8in. P.E. at £49

CANADIAN AND AMERICAN YELLOW PINE

	1st. £	2nd. £	3rd. £		1st. £	2nd. £	3rd. £
3 × 12 and up	80	69	67	3 × 8	62	55	53
3 × 11	78	63	61	3 × 7	60	53	51
3 × 10	66	58	56	3 × 4/6	58	51	49
3 × 9	64	56	54				

For complete specification and controlled prices, see issue of September 6, 1918, page 148.

Dry Wainscot Oak, per ft. super, as inch	0	3	0	..	—	
¼ in. do. do.	0	2	3	..	—	
Dry Mahogany—Honduras, Tabasco, African, per ft. super, as inch	0	3	0	..	0 4	0
Cuba, Mahogany	0	3	0	..	0 4	0
Teak (Rangoon, Moulmein or Java), per load	70	0	0	..	85 0	0
American Whitewood planks, per ft. cube	1	8	0	..	1 10	0
Scotch Glue, per lb.	0	2	9	..	—	
Liquid Glue, pint	0	3	3	..	—	

SLATES.

		Per 1,000 of 1,200 f.o.r. London. £ s. d.
Best Blue Bangor Slates,	20 by 10	24 10 0
„ „ „	16 by 8	11 12 6
First quality „	20 by 10	24 0 0
„ „	16 by 8	11 2 6
Best Blue Portmadoc	20 by 10	23 15 0
„ „	16 by 8	11 2 0
First quality „	20 by 10	23 5 0
„ „	16 by 8	10 12 6

TILES.

	Per 1,000 f.o.r. London. £ s. d.
Best machine-made tiles from Broseley or Staffordshire district	6 2 6
Ditto hand-made ditto	6 7 6
Ornamental ditto	6 10 0
Hip and valley tiles (per dozen)	0 14 0

METALS.

JOISTS, GIRDERS, ANGLES, C.I. COLUMNS, &c.

(*Prices controlled by Ministry of Munitions.*)

WROUGHT-IRON TUBES AND FITTINGS—

(Discount off List for lot of not less than £4 net value delivered direct from works. 5 per cent. less carriage forward if sent from London stocks.)

	Sizes up to and including 2 in. Tubes.	Fittings.		Sizes 2½ in. to Tubes.	Fittings.
Gas	31½	35	....	36½	37½
Water	26½	32½	....	31½	35
Steam	21½	30	....	26½	32½
Galvanised Gas	8½	27½	....	12½	30
„ Water	—	25	....	3½	27½
„ Steam	6½ *on*	22½	....	2½ *on*	25

L.C.C. COATED SOIL PIPES—London Prices ex works.

	Pipe. s. d.		Bends, stock angles. s. d.		Branches, stock angles s. d.	
2 in. per yd. in 6 fts.	4 2	..	3 1	..	3 8	
2½ in. „ „	4 9	..	3 5	..	4 7	
3 in. „ „	5 10	..	3 8	..	5 6	
3½ in. „ „	6 6	..	4 7	..	6 6	
4 in. „ „	7 1	..	5 2	..	7 3	

RAIN-WATER PIPES, &c.

	Pipe. s. d.		Bends, stock angles. s. d.		Branches, stock angles s. d.	
2 in. per yd. in 6fts. plain	2 9½	..	1 8½	..	2 4½	
2½ in. „ „	3 1	..	1 11½	..	2 9½	
3 in. „ „	3 8	..	2 6½	..	3 8	
3½ in. „ „	4 5	..	3 0	..	4 3½	
4 in. „ „	4 10	..	3 6	..	5 3	

L.C.C. DRAIN PIPES,—9 ft. lengths. London Prices. 4 in., 7s. 7d. .. 5 in., 9s. 2d. .. 6 in., 10s. 9d.

	Per ton in London. £ s. d.			£ s. d.
IRON—				
Common Bars	16 10 0	to	17 0 0	
Staffordshire Crown Bars good merchant quality	17 0 0	..	17 10 0	
Staffordshire "Marked Bars"	18 0 0	..	19 0 0	
Mild Steel Bars	21 0 0	..	21 10 0	
Steel Bars, Ferro-Concrete quality, basis price	19 10 0	..	20 0 0	
Hoop Iron, basis price	20 10 0	..	21 10 0	
„ „ Galvanised	33 0 0	..	—	
Sheet Iron Black—				
Ordinary sizes to 20 g.	23 0 0	..	23 10 0	
„ „ 24 g.	24 0 0	..	24 10 0	
„ „ 26 g.	25 0 0	..	26 0 0	
Sheet Iron, Galvanised flat, ordinary quality—				
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	34 0 0	..	—	
Ordinary sizes to 22 g. and 24 g.	34 0 0	..	34 10 0	
Ordinary sizes to 26 g.	36 0 0	..	36 10 0	

METALS (*Continued*).

	Per ton in London. £ s. d.		£ s. d.
Sheet Iron, Galvanised, flat, best quality—			
Ordinary sizes to 20 g.	35 10 0	..	—
„ „ 22 g. and 24 g.	36 0 0	..	—
Ordinary sizes to 26 g.	39 0 0	..	—
Galvanised Corrugated Sheets—			
Ordinary sizes, 6 ft. to 8 ft. 20 g.	33 0 0	..	Nominal prices only.
Ordinary sizes, 22 g. and 24 g.	33 10 0	..	Nominal prices only.
Ordinary sizes, 26 g.	32 10 0	..	Nominal prices only.
Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker	24 10 0	..	—
Best Soft Steel Sheets, 20 g. and 24 g.	24 15 0	..	—
Best Soft Steel Sheets, 26 g.	26 10 0	..	—
Cut Nails, 3 in. to 6 in.	29 0 0	..	30 0

(Under 3 in., usual trade extras.)

LEAD, &c.

	Delivered in London. £ s. d.		
LEAD—Sheet, English, 4 lb. and up	51 0 0	..	—
Pipe in coils	51 10 0	..	—
Soil Pipe	54 10 0	..	—
Compo pipe	55 10 0	..	—

NOTE—Country delivery, 20s. per ton extra; lots under 5 cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s. cwt. extra.

Old lead, ex London area, at Mills per ton	34 10 0	..	—
Do., ex country, carriage forward per ton	36 0 0	..	—
COPPER—			
Strong Sheet per lb.	0 2 3	..	—
Thin „ „	0 2 4	..	—
Copper nails „	0 2 3	..	—
Copper wire „	0 2 4	..	—
TIN—English Ingots „	0 3 9	..	—
SOLDER—Plumbers' „	0 1 9	..	—
Tinmen's „	0 2 3	..	—
Blowpipe „	0 2 7	..	—

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES AND IN SQUARES IN ORDINARY SIZES.

	Per Ft.		Per Ft.
15 oz. fourths	7d.	32 oz. fourths	10d.
„ thirds	7½d.	„ thirds	11d.
21 „ fourths	8d.	Fluted, Obscured and Enamelled Sheet,	
„ thirds	8½d.		
26 „ fourths	9d.	15 oz.	7½d.
„ thirds	9½d.	21 „	8½d.

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
⅛ Rolled plate (unobtainable)	—
¼ Rough rolled and rough cast plate	6d.
½ Rough rolled and rough cast plate	6½d.
Figured Rolled, Oxford Rolled, Baltic, Oceanic, Arctic, Stippolyte, and small and large Flemish white	6½d.
Ditto, tinted	7½d.
Rolled Sheet	6d.
White Rolled Cathedral	6d.
Tinted do.	6½d.

PAINTS, &c.

	£ s. d.
Raw Linseed Oil in pipes per gallon	0 8 0
„ „ „ in barrels „	0 8 4
„ „ „ in drums „	0 8 7
Boiled „ „ in barrels „	0 8 7
„ „ „ in drums „	0 9 0
Turpentine in barrels „	0 10 9
„ in drums „	0 11 0
Genuine Ground English White Lead, per ton (In not less than 5 cwt. casks.)	72 10 0
GENUINE WHITE LEAD PAINT— "Blackfriars," "Nine Elms," "Park," and other best brands (in 14 lb. tins) not less than 5 cwt. lots per ton delivered	102 10 0
Red Lead, Dry (packages extra) per ton	58 0 0
Best Linseed Oil Putty per cwt.	1 6 0
Filocol per cwt.	1 0 0
Size. X D Quality fkn.	0 5 6

VARNISHES, &c.

	Per gallon. £ s. d.
Fine Pale Oak	0 16 0
Pale Copal Oak	0 17 0
Superfine Pale Elastic Oak	0 19 0
Fine Extra Hard Church Oak	0 18 0
Superfine Hard-drying Oak, for seats of Churches	1 1 0
Superfine Pale Elastic Carriage	1 1 0
Fine Pale Maple	0 14 0
Finest Pale Durable Copal	1 5 0
Extra Pale French Oil	1 4 0
Eggshell Flatting	1 0 0
White Pale Enamel	1 6 0
Extra Pale Paper	0 16 0
Best Japan Gold Size	0 12 0
Best Black Japan	0 16 0
Oak and Mahogany Stain	0 12 0
Brunswick Black	0 10 0
Berlin Black	0 16 0
Knotting	1 10 0
French and Brush Polish	1 0 0

* The information given on this page has been specially compiled for THE BUILDER and is copyright. Our aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

TENDERS.

Communications for insertion under this heading should be addressed to "The Editor," and must reach us *not later than 12 noon on Wednesday.*

* Denotes *accepted.* † Denotes *provisionally accepted.*
‡ Denotes *recommended for acceptance.*

BRADFORD.—For colouring of schools, for the Education Committee :—
*City Surveyor's Dept.—Ryan-street Schools ..... £191 & £67
*Roome & Wade—St. Michael's School £122 10

ILKESTON.—For the cleaning and painting of (*a*) Hallcroft and (*b*) Granby Schools for the Corporation :—
*J. Harshorn ..... (*a*) £205 10 0
*J. Godber ..... (*b*) £129 17 6

SOUTH SHIELDS.—For alterations to 11 and 13 Keppell-street, for the Corporation :—
*W. D. Allison, South Shields .. £67 1

THE ESTATE MARKET.

Freehold with possession, No. 20, James-street, Oxford-street, will be sold on January 27 by Messrs. Elliott, Son, & Boyton. Other freehold shops, in Westbourne-grove, are in Messrs. Jones, Lang, & Co.'s hands on January 28. Messrs. Leopold Farmer & Sons' list for the following day includes a house at Southend-on-Sea. Ten houses there will also be offered, on Saturday next, by Messrs. Talbot & White. On January 30, Messrs. Robins, Gore & Mercer will offer Soho freeholds. Six shops in Richmond and others in East Sheen, are to be sold by Messrs. Drew & Sons on January 29. A site of 4,826 square feet in Cursitor-street, Chancery-lane, is to be offered by Messrs. Thurgood & Martin jointly with Messrs. Knight, Frank & Rutley.

Town houses, including the late Lord Nicholson's, will be sold on February 19 by Messrs. Trollope, and Messrs. Goldschmidt & Howland have a freehold in Maresfield-gardens, Hampstead.

Centrally situated freehold shops in Liverpool are for sale on January 28 by Messrs. Paterson & Thomas. The site, in Church-street and Parker-street, has an area of 100 square yards. Engineering works at Sutton will be offered on February 20 as a going concern by Messrs. Morgan, Baines & Clark.

Corner premises near Victoria Station, in Wilton-road, are to be sold on January 28, by Messrs. Rogers, Chapman & Thomas. On the same date Messrs. Rutley, Vine, & Gurney are offering small houses in the Isle of Thanet, and other property. Hampstead residences will be sold, in the same week, by Mr. Ernest Owers. A Woking freehold, in Mount Hermon-road, with over an acre, is to be submitted in Old Bond-street, Piccadilly, on February 5, by Mr. W. A. Ball. Five freehold shops in Margate are included in Messrs. Ventom, Cooper & Co.'s list, for March 4.

The remaining portion of the outlying western sections of the Eaton estate will be offered at Chester on January 29, by order of the Duke of Westminster. An Essex estate of 1,000 acres, near Braintree, known as Saling-grove, is for sale locally on February 5, by Messrs. Castiglione & Scott, Ltd., and two residences, one near Woldingham and the other between Arundel and Goodwood, will shortly be offered by Messrs. Goddard & Smith, in Piccadilly.—*The Times.*

THE BUILDING BY-LAWS OF HALIFAX.

A DEPUTATION from the Halifax Chamber of Commerce waited upon the Town Council recently, and urged the revision of the Corporation by-laws for industrial buildings.

Mr. Clarkson (secretary of the Chamber) said the effect of the local building by-laws was burdensome on industry, because industrial premises might be erected in other districts at a less cost than in Halifax. Until there was a revision of the by-laws such as was asked for it was hoped that the existing regulations would not be applied rigidly.

Mr. H. Campbell, another member of the deputation, said his firm desired to extend their premises, and it had come to the point whether they should extend in Halifax or go elsewhere. No one wished to leave a district in which a business had been established without first making serious efforts to remove the obstacles in the way of remaining. Other firms had been in the same predicament. Halifax insisted upon the erection of more expensive industrial buildings than any other district he knew of. Walls from 16 to 18 in. thick had been in existence at the works of his firm, and though subjected to heavy strains had shown no defects or signs of weakness. Yet when, during the war, extensions of these walls were required, the building by-laws required them to be from 27 to 30 in. thick, thereby causing additional expense and locking up of capital which would have been better employed in remunerative work. Another member of the Chamber had plans for the erection of new works in Halifax, but he found that if he removed to Elland he could build them at a cost of £1,500 less than he could in Halifax, this difference being solely due to the difference in the by-laws, or the interpretation of them. For all practical purposes the use of ferro-concrete was banned in Halifax, and Belfast roofing was absolutely prohibited. His competitors in many districts could cover a steel frame structure with wood or galvanised iron, but he could not do so, the result being that one of his competitors could put up a building for £16,000, for which he would have to spend £40,000.

The Mayor informed the deputation that the Corporation would give serious consideration to the points raised, and the Council referred the question to the Improvement Committee.

TRADE NEWS.

Mr. B. B. Tarring, O.B.E., has been appointed manager for the firm of contractors Messrs. W. Cubitt & Co., Ltd., Gray's Inn-road, London, W.C. He will no doubt be remembered in connection with the erection of the largest shell-filling factory in this country, viz., Chilwell, Notts, which was completed in record time under his direction and personal supervision. Prior to that he supervised the erection of the County Hall, Westminster Bridge.

The August 12 issue of our Australian contemporary *Building* contains several interesting articles, *i.e.*, "Architectural Decoration," "City Design and Town Planning," "Fireproof Windows," &c., &c. In the course of the latter article reference is made to the Luxfer Fire-resisting Glazing, which is now made in Australia by Messrs. Brooks Robinson & Co., Ltd., Melbourne.

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